

# SAN FRANCISCO PUBLIC UTILITIES COMMISSION SUNOL/NILES DAM REMOVAL PROJECT

EIR Certification Date: March 16, 2006

Environmental Impact Report Comments and Responses Planning Department Case No. 2001.1149E State Clearinghouse No. 2004072049 Date of Publication: February 24, 2006

DOCUMENTS DEPT.

FEB 2 7 2006

SAN FRANCISCO PUBLIC LIBRARY

Draft EIR Publication Date: October 24, 2005
Draft EIR Public Hearing Date (San Francisco): December 1, 2005
Draft EIR Public Hearing Date (Fremont): November 30, 2005
Draft EIR Public Comment Period: October 24, 2005 to December 7, 2005







### San Francisco Public Library

Government Information Center San Francisco Public Library 100 Larkin Street, 5th Floor San Francisco, CA 94102

### REFERENCE BOOK

Not to be taken from the Library

# SAN FRANCISCO PUBLIC UTILITIES COMMISSION SUNOL/NILES DAM REMOVAL PROJECT

Environmental Impact Report Comments and Responses Planning Department Case No. 2001.1149E State Clearinghouse No. 2004072049 Date of Publication: February 24, 2006

> Draft EIR Publication Date: October 24, 2005 Draft EIR Public Hearing Date (San Francisco): December 1, 2005 Draft EIR Public Hearing Date (Fremont): November 30, 2005 Draft EIR Public Comment Period: October 24, 2005 to December 7, 2005 EIR Certification Date: March 16, 2006

225 Bush Street Suite 1700 San Francisco, CA 94104 415.896.5900 www.esassoc.com

Los Angeles

Oakland

Orlando

Petaluma

Sacramento

Seattle

Tampa

201591a

This report has been printed on post-consumer recycled paper.



### **TABLE OF CONTENTS**

## San Francisco Public Utilities Commission Sunol/Niles Dam Removal Project Environmental Impact Report – Comments and Responses

		<u>Page</u>
l.	Introduction	C&R-1
	A. Comments on the Draft EIR and Responses to Comments	C&R-1
	B. Staff-Initiated Text Changes to the Draft EIR	C&R-2
II.	Comments and Responses	C&R-3
	Responses	
	A. State Clearinghouse - Terry Roberts, Director	C&R-8
	B1. California Department of Transportation - Timothy C. Sable,	
	District Branch Chief IGR/CEQA	C&R-11
	B2. California Department of Transportation - Timothy C. Sable,	
	District Branch Chief IGR/CEQA	C&R-15
	C. Alameda County Flood Control and Water Conservation District –	
	Zone 7 - Mary Lim, Environmental Services Program Manager	C&R-22
	D. County of Alameda Public Works Agency - Donald J. LaBelle, Director	C&R-26
	E. Alameda County Water District - Paul Piraino, General Manager	C&R-32
	F. City of Fremont Development and Environmental Services	
	Department – Planning - Nancy Minicucci, Associate Planner	C&R-39
	G. City and County of San Francisco Landmarks Preservation	
	Advisory Board - M. Bridget Maley, President	C&R-44
	H. Alameda Creek Alliance - Jeff Miller, Director	C&R-50
	Pacific Locomotive Association, Maintenance of Way Department -	our co
	Steve Rusconi, PE	C&R-56
	J. Watershed Sciences - Laurel Collins, Director	C&R-63
	K. Carlyle Holmes	C&R-70
	L. Scott Taylor	C&R-72
	M. Public Hearing Comments November 30, 2005	C&R-90
	with a distributing dominients recomber 30, 2003	Odi (-30
III.	Staff-Initiated Text Changes	C&R-91
	A. Introduction	C&R-91
	B. Text Revisions	C&R-91
V.	References	C&R-106

#### <u>Page</u>

#### **List of Tables**

1. Public Agencies, Organizations, and Public Commenters Commenting in Writing C&R-2

### **CHAPTER I**

### Introduction

This Response to Comment (RTC) document has been prepared to respond to comments received on the Draft Environmental Impact Report (DEIR) for the San Francisco Public Utilities Commission's (SFPUC) *Sunol/Niles Dam Removal Project* (State Clearinghouse No. 2004072049, October 2005).

This RTC document for the Sunol/Niles Dam Removal Project includes:

- A list of all persons, organizations, and public agencies who submitted written comments
  on the DEIR and who testified at the public hearing on the DEIR held in Fremont on
  November 30, 2005<sup>1</sup> (Chapter I);
- The written comments received on the DEIR along with a response to each comment and the transcript from the public hearing on the DEIR held on November 30, 2005 in Fremont and responses (Chapter II);
- Staff-initiated text changes to the DEIR (Chapter III); and,
- References (Chapter IV). These references are in addition to those included in the DEIR.

This document responds to the written and oral comments on the DEIR and revises the DEIR as necessary in response to these comments. These comments and responses will be incorporated into the Final EIR as a new chapter. Text changes resulting from comments and responses will also be incorporated into the Final EIR, as indicted in the responses and in Chapter III of this document.

## A. Comments on the DEIR and Responses to Comments

The DEIR was circulated for public review from October 24 through December 7, 2005. Agencies and organizations that submitted written comments on the DEIR during the public review period are listed in Table 1. The following speakers spoke at the public hearing on November 30, 2005 at the Fremont Public Library:

- Jeff Miller;
- Beverly Ortiz; and,
- Scott Taylor

Sunol/Niles Dam Removal Project

February 2006

A public hearing was also held in San Francisco on December 1, 2005 but no members of the public spoke at that hearing.

TABLE 1
PUBLIC AGENCIES, ORGANIZATIONS AND PUBLIC COMMENTERS
COMMENTING IN WRITING

Commenter No.	Comments Received from	COMMENTER'S AFFILIATION	Date
Α	Terry Roberts, Director	State Clearinghouse	December 8, 2005
B1	Timothy C. Sable, District Branch Chief IGR/CEQA	California Department of Transportation	December 5, 2005
B2	Timothy C. Sable, District Branch Chief IGR/CEQA	California Department of Transportation	December 21, 2005
С	Mary Lim, Environmental Services Program Manager	Alameda County Flood Control and Water Conservation District – Zone 7	November 18, 2005
D	Donald J. LaBelle, Director	County of Alameda Public Works Agency	December 7, 2005
E	Paul Piraino, General Manager	Alameda County Water District	December 7, 2005
F	Nancy Minicucci, Associate Planner	City of Fremont Development and Environmental Services Department - Planning	December 7, 2005
G	M. Bridget Maley, President	City and County of San Francisco Landmarks Preservation Advisory Board	December 7, 2005
Н	Jeff Miller, Director	Alameda Creek Alliance	December 2, 2005
I	Steve Rusconi, PE	Pacific Locomotive Association, Maintenance of Way Department	December 6, 2005
J	Laurel Collins, Director	Watershed Sciences	December 5, 2005
K	Carlyle Holmes		October 27, 2005
L	Scott Taylor		November 8, 2005

The comments and responses are presented in Chapter II, in the order as shown in Table 1. The responses to comments are numbered to correspond to the comment numbers that appear in the margins of the comment letter. Responses to the public hearing comments follow the transcript. These comments and responses are designated with an 'M.'

### B. Staff-Initiated Text Changes to the DEIR

Revisions to the text of the DEIR are in response to comments received during the public review period or are intended to clarify the DEIR text. These revisions are presented in Chapter III, and are organized by the page number as they appear in the DEIR. Additions, deletions and corrections to the DEIR are made by indicating the page and paragraph to be revised and a description of the text changes. Additions are indicated by a single underline; deletions are indicated by a "strike-out." For example, in the following sentence the numerical "two" is replaced by "to":

<u>ToTwo</u> improve readability and minimize redundancy in response, the comments are organized generally by type of agency.

### **CHAPTER II**

## Comments and Responses

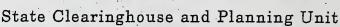
This chapter presents each commenter's letter followed by the corresponding responses. The responses to comments are numbered to correspond to the comment numbers that appear in the margins of the comment letter and the public hearing transcript. Where the responses indicate additions or deletions to the text of the EIR, additions are indicated in <u>underline</u>, deletions in <u>strikeouts</u>. All changes to the DEIR text are summarized in Chapter III.



#### Amold Schwarzenegger Governor

#### STATE OF CALIFORNIA

## Governor's Office of Planning and Research





Sean Walsh: Director

December 8, 2005.

City & County of S.F. Dept. of City Planing

DEC 0 9 2005

OFFICE OF ENVIRONMENTAL REVIEW

Diana Sokolove San Francisco City and County Planning Department 30 Van Ness, Suite 4150 San Francisco, CA 94103

Subject: Sunol and Niles Dam Removal Project

SCH#: 2004072049

Dear Diana Sokolove:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that reviewed your document. The review period closed on December 7, 2005, and the comments from the responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse immediately. Please refer to the project's ten-digit State Clearinghouse number in future correspondence so that we may respond promptly.

Please note that Section 21104(c) of the California Public Resources Code states that:

"A responsible or other public agency shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process.

Sincerely,

Terry Roberts

Director, State Clearinghouse

Serry Roberts

Enclosures :

cc: Resources Agency

## Document Details Report State Clearinghouse Data Base

SCH# 2004072049

Project Title Sunol and Niles Dam Removal Project

Lead Agency San Francisco, City and County Planning Dept.

Type EIR Draft EIR

Description The San Francisco Public Utilities Commission (SFPUC) is proposing to partially remove Sunol and

Niles Dam. There are three primary and equal project objectives: 1) Remove barriers to fish passage in keeping with the Alameda Creek Fisheries Restoration Workgroup goal of restoring a self-sustaining population of steelhead to the Alameda Creek watershed. 2) Reduce or eliminate an existing public safety hazard and related SFPUC risk management concerns. 3) Perform dam removal in an

environmentally sensitive manner.

**Lead Agency Contact** 

Name Dlana Sokolove

Agency San Francisco City and County Planning Department

Phone 415-558-5971 Fax

emall

Address 30 Van Ness, Sulte 4150

City San Francisco State CA Zip 94103

**Project Location** 

County Alameda

City Region

Cross Streets

Parcel No.

Township 4S Range 1E, 1W Section 7, 10 Base

Proximity to:

Highways 84, 238, 680

Airports

Rallways Niles Canyon RR, UPRR

Waterways Alameda Creek, Arroyo de la Laguna, Stonybrook Creek, Sinbad Creek, several unnamed drainages

Schools Sunol Glen Elementary School

Land Use Dams

Project Issues Archaeologic-Historic; Flood Plain/Flooding; Geologic/Seismic; Noise; Public Services; Soil

Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Vegetation; Water

Quality; Water Supply; Wetland/Riparian; Wildlife; Landuse; Cumulative Effects

Reviewing Resources Agency; Department of Fish and Game, Region 3; Department of Boating and Waterways;

Agencies Office of Historic Preservation: Department of Parks and Recreation: San Francisco Bay Conservation

Office of Historic Preservation; Department of Parks and Recreation; San Francisco Bay Conservation and Development Commission; Department of Water Resources; Office of Emergency Services; California Highway Patrol; Caltrans, District 4; Native American Heritage Commission; Public Utilities

Commission; State Lands Commission; Regional Water Quality Control Board, Region 2

Date Received 10/24/2005 Start of Review 10/24/2005 End of Review 12/07/2005

Note: Blanks in data fields result from insufficient information provided by lead agency.

#### DEPARTMENT OF TRANSPORTATION

STATE OF CALIFORNIA -BUSINESS, TRANSPORTATION AND HOUSING AGENC

111 GRAND AVENUE P. O. BOX 23660 OAKLAND, CA 94623-0660 PHONE (510) 286-5505 FAX (510) 286-5513 TTY (800) 735-2929

14/00/4000

RECEIVED
DEC 0 5 2005
Clear
12.7.05
DEC 15 2005

Flex your power! Be energy efficient!

December 5, 2005

ALA084425 SCH#2004072049

Environmental Review Officer San Francisco PUC 30 Van Ness, Suite 4150 San Francisco, CA 94102

Dear Environmental Review Officer:

#### SUNOL/NILES DAM REMOVAL - ENVIRONMENTAL IMPACT REPORT

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Sunol/Niles Dam Removal project. The comment presented below is based on the Environmental Impact Report (EIR); additional comments may be forthcoming pending final review of the EIR. As lead agency, the Public Utilities Commission is responsible for all project mitigation, including improvements to state highways. Any required roadway improvements should be completed prior to issuance of the project's building permit. Since an encroachment permit is required for work in the State Right of Way (ROW), and the Department will not issue a permit until our concerns are adequately addressed, we strongly recommend that the lead agency ensure resolution of the Department's CEQA concerns prior to submittal of the encroachment permit application. Further comments will be provided during the encroachment permit process; see the end of this letter for more information regarding the encroachment permit process.

#### Encroachment Permit

Work that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information.

http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief
Office of Permits
California DOT, District 4
P.O. Box 23660
Oakland, CA 94623-0660

"Caltrans improves mobility across California"

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

TIMOTHY & SABLE District Branch Chief IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

## A. Response To: Terry Roberts, State Clearinghouse, December 8, 2005

A-1 This letter acknowledges that the comment period for the DEIR closed on December 7, 2005 and listed the state agencies to which the State Clearinghouse submitted the DEIR. One agency responded with comments—the California Department of Transportation (comments from this letter are addressed separately). The State Clearinghouse letter states that the San Francisco Planning Department has complied with the State Clearinghouse review requirements for draft environmental impact reports pursuant to the California Environmental Quality Act. No response is required.

#### DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE P. O. BOX 23660 OAKLAND, CA 94623-0660 PHONE (510) 286-5505 FAX (510) 286-5513 TTY (800) 735-2929

December 5, 2005

City & County of S.F. Dept. of City Planing

Flex your power! Be energy efficient!

DEC 0 7 2005

OFFICE OF ENVIRONMENTAL REVIEW

ALA084425 SCH#2004072049

Environmental Review Officer San Francisco PUC 30 Van Ness, Suite 4150 San Francisco, CA 94102

Dear Environmental Review Officer:

#### SUNOL/NILES DAM REMOVAL - ENVIRONMENTAL IMPACT REPORT

Thank you for including the California Department of Transportation (Department) in the environmental review process for the Sunol/Niles Dam Removal project. The comment presented below is based on the Environmental Impact Report (EIR); additional comments may be forthcoming pending final review of the EIR. As lead agency, the Public Utilities Commission is responsible for all project mitigation, including improvements to state highways. Any required roadway improvements should be completed prior to issuance of the project's building permit. Since an encroachment permit is required for work in the State Right of Way (ROW), and the Department will not issue a permit until our concerns are adequately addressed, we strongly recommend that the lead agency ensure resolution of the Department's CEQA concerns prior to submittal of the encroachment permit application. Further comments will be provided during the encroachment permit process; see the end of this letter for more information regarding the encroachment permit process.

#### **Encroachment Permit**

Work that encroaches onto the State Right of Way (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information.

http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief Office of Permits California DOT, District 4 P.O. Box 23660 Oakland, CA 94623-0660 Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or <u>patricia\_maurice@dot.ca.gov</u> with any questions regarding this letter.

Sincerely,

TIMOTHY . SABLE District Branch Chief

IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

# B1. Response To: Timothy C. Sable, California Department of Transportation, December 5, 2005

- B1-1 This comment acknowledges that the SFPUC will need an encroachment permit for work in the state right-of-way and that the California Department of Transportation (Caltrans) will not issue the permit until Caltrans' CEQA concerns are adequately addressed. The SFPUC acknowledges that they will need an encroachment permit.
- B1-2 This comment acknowledges that in order for the SFPUC to obtain an encroachment permit, an application, the environmental document, and five sets of plans clearly indicating state right-of-way must be submitted to the address on the comment letter. Furthermore, the traffic-related mitigation measures should be incorporated into the construction plans. The SFPUC shall submit the requested information and the traffic-related mitigation measures (see DEIR pages I-11 1-12 and V-2) shall be incorporated into the construction plans.

#### DEPARTMENT OF TRANSPORTATION

111 GRAND AVENUE P. O. BOX 23660 OAKLAND, CA 94623-0660 PHONE (510) 286-5505 FAX (510) 286-5513 TTY (800) 735-2929



Flex your power! Be energy efficient!

December 21, 2005

ALA084425 SCH#2004072049

Ms. Diana Sokolove San Francisco PUC 30 Van Ness, Suite 4150 San Francisco, CA 94102

Dear Ms. Sokolove:

#### SUNOL/NILES DAM REMOVAL - DRAFT ENVIRONMENTAL IMPACT REPORT

This letter supplements comments previously submitted by the California Department of Transportation (Department) for the Sunol/Niles Dam Removal project on December 5, 2005. The comments presented below are based on the Draft Environmental Impact Report and are limited to potential effects the proposed undertaking may have on cultural resources within Caltrans' right-of-way (ROW); hence, comments on the removal of the Sunol Dam are not included. Please call Meg Scantlebury at (510) 286-5616 with any questions, and forward additional project information to the following address:

Janet Pape, Senior Environmental Planner
Cultural Resource Studies Office, Mail Station 8A
California DOT, District 4
111 Grand Avenue
Oakland, CA 94612

The Niles Dam, while not in Caltrans' ROW, is a component of the Vallejo's Mill/Spring Valley Water Company water-conveyance system. This system is made up of three components: an aqueduct in Caltrans' ROW, the turnout or diversion structure partially in Caltrans ROW and partially in San Francisco Public Utilides Commission (SFPUC) ROW, and the dam which is located in SFPUC ROW. In a Historic Property Survey Report, the Caltrans' Office of Cultural Resource Studies determined that the system as a whole was eligible for the National Register of Historic Places (NRHP). The State Historic Preservation Officer (SHPO) concurred with this finding in a letter dated November 30, 2004. Therefore, we are commenting on the removal of the dam because it is a component of the NRHP-eligible system that spans both Caltrans and SFPUC property. The removal of the dam has the potential to be an adverse impact on the water-conveyance system as a whole, and therefore impact the portion of the system that is in Caltrans' ROW.

"Caltrans improves mobility across California"

Ms. Diana Sokojove December 21, 2005 Page 2

Summary/Historic Resources: The statement that, "... the mitigation measures identified below would reduce impacts on other historic resources to a less-than-significant level" is vague. What other resources? Also, the loss of the Niles Dam will have the potential to adversely impact the historic water-conveyance system and its components. This needs to be determined. It also needs to be ascertained if mitigation efforts will or will not reduce the impacts to the system as a whole to a less-than-significant level.

Prior to demolition, the potential for vibration resulting from pile-driving needs to be evaluated. Unreinforced masonry structures, such as the dam, aqueduct and turn-out, can be damaged from vibration. Such a study may determine that mechanical vibration monitors should be installed to alert the team before vibration levels reach a potentially damaging level. It is important that the submerged or encapsulated layers of the dam not be affected by demolition activities prior to documentation. An archaeologist is not qualified to monitor for damage to the structures resulting from vibration:

The separation of Tasks G-1a and G-1b seems arbitrary. Documentation is needed both before and during demolition to reveal the layered construction of the dam structure. Simply "monitoring" the destruction is not an effective way to gather the important information. An architectural historian and historic archaeologist team should work together on this in a fully integrated fashion. The objective should be to deconstruct the dam so each successive change (additions and subtractions to the fabric of the dam) is revealed and documented with the ultimate goal of understanding how the dam was adapted over time, what the core (early) structure looked like, and how the initial structure performed and was anchored into the bedrock. To accomplish that, several cross-sectional cuts through the dam and diversion structure should be taken using a stratigraphic approach and methods defined by Edward C. Harris (1989, Principles of Archaeological Stratigraphy, Second Revised Edition, Academic Press, London and San Diego). Saw cuts might be more informative (and easier to document with drawings and photos) than jack-hammering away the structure. It will be critical to get an elevation at the bottom of the intake structure for purposes of assessing the gradient or "fall" of the canal and its implications for the sophistication of the design (speed and flow; erosion coefficient; etc.). Once the study is complete, dam removal without further monitoring is reasonable.

Although it would be appropriate to analyze the material make-up of a mortar sample as part of the research, unless unexpected material is discovered, collection or curation of material from the dam would seem to have little value.

The NAGPRA/burials discussion does not appear to be relevant to this undertaking.

As much of the diversion structure should be retained as is feasible. With the removal of any portion of the diversion structure, the potential for water to enter the aqueduct is a concern. To ensure that the aqueduct is preserved, and to eliminate a potential safety hazard to the public and damage to the highway, access needs to be carefully obstructed.

The adverse impact to the system as a whole should be addressed, and figured into the mitigation. After removal of the dam, the system needs to be evaluated to determine if it is still eligible for the NRHP.

Please provide the draft Data Recovery Plan for review and comment.

"Caltruny improves mobility across California"

Ms. Diana Sokolove December 21, 2005 Page 3

#### Encroachment Permit

Work that encroaches onto the State (ROW) requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating State ROW must be submitted to the address below. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information. http://www.dot.ca.gov/hq/traffops/developserv/permits/

Sean Nozzari, District Office Chief Office of Permits California DOT, District 4 P.O. Box 23660 Oakland, CA 94623-0660

Please feel free to call or email Patricia Maurice of my staff at (510) 622-1644 or patricia maurice@dot.ca.gov with any questions regarding this letter.

Sincerely,

TIMOTHY. SABLE District Branch Chief

IGR/CEQA

c: Ms. Terry Roberts, State Clearinghouse

# B2. Response To: Timothy C. Sable, California Department of Transportation, December 21, 2005

B2-1 The DEIR provided information on the separate components of the Vallejo's Mill/Spring Valley Water Company (SVWC) system as well as the system itself. The DEIR found that the demolition of the Sunol and Niles Dams to be a significant and unavoidable impact on those two historical resources as well as on the Mexican-era Vallejo Dam.

As stated on page IV.G-11 of the DEIR, the Vallejo's Mill/SVWC water-conveyance system referred to in the comment is eligible for the National Register of Historic Places (NRHP)/California Register of Historic Places (CRHP). The DEIR also states on pages IV.G-13 and IV.G-14 that demolition of Niles Dam, which is inclusive of the Mexicanera Vallejo Dam, constitutes a significant impact on historical resources. Mitigation Measure G-1a on page V-15 of the DEIR will document the significance of the historical resource, but this mitigation measure alone would not reduce the impacts to a less-than-significant level.

Page IV.G-14 of the DEIR also states that the proposed project has the potential to cause a substantial adverse change to a portion of the Vallejo's Mill/SVWC water-conveyance system. The resources that would be affected by the proposed project are the Mexican-era Vallejo Dam and a portion of the Vallejo Aqueduct. Mitigation Measure G-1b on page V-15 of the DEIR will preserve all scientific/historical information related to these resources and preserve representative remains of the Vallejo Dam and Aqueduct. This would thus reduce project effects on the scientific/historical research value (Criterion D) of these historical resources to a less-than-significant level. Clarifying language is added to the fourth paragraph on page IV.G-14.

The last sentence of the third full paragraph of page IV.G-14 is revised as follows:

Implementation of Mitigation Measure G-1b would result in the preservation of all scientific/historical information or of representative remains of the Vallejo Dam and Aqueduct and would thus reduce project effects to the scientific/historical research value (Criterion D) of these historical resources to a less-than-significant level.

Mitigation Measure G-1b on page V-15 of the DEIR will further reduce the effects of the less-than-significant impact on the Vallejo's Mill/SVWC water-conveyance system as a whole. In addition, for clarification, the following will be added to Mitigation Measure G-1b in the DEIR:

Following the last paragraph of Mitigation Measure G-1b on pages I-25 and V-16, the following paragraph is added for clarification:

Following the demolition of Niles Dam, the evaluation related to the remaining portions of the Vallejo's Mill/SVWC water-conveyance system

will be updated by a professional historian/architectural historian and archaeologist. This information will be presented in a collaborative report that will be distributed to the same recipients as the HAER report specified in Mitigation Measure G1-a.

The commenter notes that demolition of the Vallejo Dam has the potential to cause a substantial adverse change to the Vallejo's Mill/SVWC water-conveyance system as a whole. It is important to note that the proposed project would not directly affect the intake structure, and it would only affect a portion of the Vallejo Aqueduct (i.e., the earlier diversion structure to the aqueduct would be affected by the removal of Niles Dam; the extent to which the Mexican-era structure exists at the dam site is not currently known). After the dam is demolished, the remaining portions of the Vallejo's Mill/SVWC water-conveyance system, namely the intake structure and the Vallejo Aqueduct, would still collectively be eligible for listing in the NRHP under both Criteria A and D given their significance in terms of the history of water development during the Mexican-era and by SVWC, and in understanding the construction of Mexican-era water delivery systems. Therefore, the impact on the Vallejo's Mill/SVWC water-conveyance system as a whole after demolition of the dam is considered a less-than-significant impact. For clarification, the following will be added to the DEIR:

Following the last full paragraph of on page IV.G-14, the following paragraph is added:

After the Mexican-era Vallejo Dam is demolished, the remaining portions of the Vallejo's Mill/SVWC water-conveyance system, namely the intake structure and the Vallejo Aqueduct, would still collectively be eligible for listing in the NRHP under both Criteria A and D given their significance in terms of the history of water development during the Mexican-era and by SVWC, and in understanding the construction of Mexican-era water delivery systems. The proposed project would not result in a substantial adverse change in the significance of the system as a whole. Therefore, the impact on the Vallejo's Mill/SVWC water-conveyance system as a whole after demolition of the dam is considered a less-than-significant impact.

Also, as shown on Figure 4 in the DEIR, the proposed project would not directly affect those portions of the resource within Caltrans' right-of-way.

B2-2 As stated in the DEIR on pages IV.G-13 – 14, the impacts on Niles Dam and Sunol Dam are considered significant and unavoidable. Mitigation Measure G-1a also states that the impacts on the dams are considered significant and unavoidable. The second sentence following the Historical Resources heading on page V-15 states that "... the mitigation measures identified below would reduce impacts on other historical resources to a less-than-significant level" acknowledges that some of the mitigation measures will reduce impacts to a level of less-than-significant. However, the DEIR is revised to clarify that the mitigation measure may not reduce all the impacts to less-than-significant:

The last paragraph on page I-23 and the paragraph under Historical Resources on page V-15 is revised as follows:

Impacts on architectural resources due to demolition of the historical dams cannot be mitigated to a less-than-significant level, even with implementation of Mitigation Measures G-1a and G-1b. However, the mitigation measures identified below would reduce significant impacts on other historical resources, including the impacts on the Mexican-era Vallejo Dam and Aqueduct under Criterion D, potential impacts on currently unknown or poorly recorded archeological resources, and potential impacts on paleontologic resources, to a less-than-significant level.

Also, see response to comment B2-1.

B2-3 Depending on the preferred option to divert and dewater Alameda Creek during dam removal activities, sheetpiles may be driven into the upstream sediments to form cutoff dams or to channel water around the work area (see pages III-4 – III-5 and III-14 – III-15 in the DEIR). Sheetpile driving, as well as other construction activities, can cause varying levels of ground vibration. The impacts associated with vibration are addressed in the DEIR in Section H. Noise and Vibration. As discussed on page IV.H-8, construction activities could generate vibrations in the project area that could affect nearby structures and occupants of nearby buildings.

As stated in the DEIR on page IV.H-5, the U.S. Bureau of Mines threshold criterion for avoiding structural damage to buildings is a peak particle velocity (ppv) of 2 inches per second (in/sec). Minor structural damage occurs at a ppv of 4 in/sec. The activity with greatest potential to cause ground vibrations is controlled blasting. Controlled blasting operations could generate a ppv of 1.25 in/sec within 300 feet (page IV.H-8).

Vibratory sheetpile driving produces far less ground vibration than controlled blasting. Under the proposed project, sheetpiles would be driven into the sediments accumulated behind the two dams using an excavator fitted with a mechanical vibratory driving attachment. Vibratory pile drivers apply vibrations to the piles to enable them to penetrate certain soil strata. The vibrations temporarily disturb the soil surrounding the pile, which reduces friction between the pile and the soil. This enables the sheetpile to be driven into the ground by its own weight plus the weight of the driver. The generated vibrations quickly attenuate near the sheetpile. Temporary sheetpile driving at Niles Dam is not expected to approach or exceed a ppv of 2 in/sec, and therefore, active monitoring of the dam structure during pile driving is not necessary.

B2-4 Mitigation Measures G-1a and G-1b are distinct mitigation measures because the two mitigation measures address potential effects on different resources, and thus require the implementation of different procedures that aim to satisfy different standards. The purpose of Mitigation Measure G-1a is to, at a minimum, require the documentation of the dams to HABS/HAER standards despite the fact this recordation does not mitigate the

physical impact on the environment caused by the demolition of the dams, CEOA requires all feasible mitigation be undertaken and this level of documentation is proportionate with the level of significance of this resource. The purpose of Mitigation Measure G-1b is to provide the framework for demolition so that the scientifically consequential information can be obtained as the dam is removed and prepare a data recovery plan prior to its removal. As stated in Mitigation Measure G-1b, "the principal objective of the ARD/DRP will be to delineate the assumptions, principles, and rules to be followed during the dam's removal" (page V-15 in the DEIR). Further, the ARD/DRP is stipulated to produce "Documentary preservation of the scientifically consequential information regarding the location, method of construction, use of materials, purpose and function, and level of workmanship" (page V-16); hence, allowing for record keeping during the excavation of the dam and the recordation of stratigraphy, which is fundamental to any archaeological excavation. The methods of excavation (e.g., saw cutting versus other forms of demolition) will also be determined and described in the ARD/DRP. The investigation methodology recommended by the commenter is at a level of specificity that will be addressed in the ARD/DRP as required by the mitigation measure, rather than in the DEIR. Moreover, the mitigation stipulates that the ARD/DRP shall provide for the "Gathering of information during demolition to allow the reconstruction of how the structure looked in the past" (page V-16). These standards appear to meet with the commenter's desire to preserve both the stratigraphic record and the ability to record the physical structure itself both prior and during Niles Dam removal.

With respect to the comment about monitoring, Mitigation Measure G-1b does not propose archaeological monitoring of the demolition of Vallejo/Niles Dam since, as the commenter notes, it would not be an effective method of recovering scientific/ historical information concerning the dam. Mitigation Measure G-1b requires implementation of a scientific data recovery program based on an archeological research design and a data recovery plan. Mitigation Measure G-2a requires only implementation of an archaeological monitoring program in project areas surrounding Sunol and Niles Dams since an archaeological records search, site history, and archaeological field survey have not identified the presence of CEQA-significant archaeological resources in these areas. A testing program is not warranted in these areas.

With respect to the comment about integrating the work of an architectural historian and historic archaeologist team, the DEIR has been revised to clarify that the architectural and archaeological documentation of Vallejo/Niles Dam, as required in Mitigation Measures G-1a and G-1b, be a professionally integrated effort, to the extent feasible.

Mitigation Measure G-1a on pages I-24 and V-15 is revised as follows:

**G-1a** Prior to the demolition of Sunol and Niles Dams, the SFPUC will retain a qualified architectural historian who, in consultation with a qualified archaeologist, will document Sunol and Niles Dams in accordance with the

Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) standards (National Park Service, 2003). Pursuant to Section 110(b) of the National Historic Preservation Act, final HABS and HAER documentation will be submitted to the Northwest Information Center, Sonoma State University, the California Historical Resources Information System, the History Room in the San Francisco Public Library, and the Major Environmental Analysis section of the San Francisco Planning Department. The recordation of Sunol and Niles Dams to HABS/HAER standards, or other treatment measures, does not mitigate to a less-than-significant level the impact caused by demolition of a historical resource (14 California Code of Regulations Section 15126.4[b]); therefore, a significant unavoidable impact remains.

See also responses to comments B2-1 and F-2. Response to comment F-2 includes changes to Mitigation Measure G1-b in response to this comment as well as further clarifications.

- B2-5 The ADR required by Mitigation Measure G-1b will discuss the appropriateness of final disposition alternatives for recovered archaeological material related to Vallejo/Niles Dam, including curation or interpretive/educational use. Since no research design has yet been prepared for the Vallejo/Niles Dam and the original dam component has not yet been exposed or evaluated, it remains undetermined if any material remains of the dam have long-term research value. It is clear from remarks made by other commenters on the DEIR, that remains of the dam, apart from any research value, could have some interpretive/public educational value.
- B2-6 The DEIR does not refer to the Native American Graves Protection and Repatriation Act (NAGPRA) in the historical resources mitigation measures because it does not apply to this project. The provision in Mitigation Measure G-2a provides State of California guidance in the event of the unexpected discovery of human remains, in accordance with CEQA Guidelines 15064.5[e].
- B2-7 As stated in the DEIR on page III-15, as much of the right abutment as geotechnically feasible would be removed. Project objective #1 is to remove barriers to fish passage. According to the Weiss report (Appendix B, page xii in the DEIR), it is necessary to remove the entire left abutment and as much of the right abutment as feasible to accommodate the bankfull and floodprone width, and to thereby allow Alameda Creek to restore a natural channel morphology and reduce the risk of creating a fish passage barrier. Details of the removal of the right abutment would be developed during final design (see Figure 9). As with Sunol Dam (see page III-9), the existing aqueduct would be permanently plugged to prevent flows from entering downstream segments of the aqueduct. The DEIR is revised to clarify that the aqueduct at Niles Dam would be

plugged and that the abutments are being removed to accommodate bankfull channel and floodprone width<sup>1</sup>.

The third full paragraph on page I-8 is revised as follows:

#### Dam Removal

Niles Dam would be lowered to an elevation of approximately 108.4 feet, which is the estimated historic pre-dam bed elevation and is 6.9 feet below the dam crest. However, the actual height of the dam is not known with certainty, and therefore the depth of removal could be greater than 6.9 feet. The limits of dam removal would be established during predemolition surveys. In addition, the left abutment would be removed in its entirety, and as much of the right abutment as geotechnically feasible (to accommodate the bankfull channel and the floodprone width; Weiss Associates, 2004) would be removed and the aqueduct plugged. Portions of the right abutment are adjacent to SR 84 and may contain a short segment of the Vallejo Aqueduct. Only that portion of the Vallejo Aqueduct within the abutment to SR 84 may be removed. Between 200 and 800 cy of sediment stored behind Niles Dam would be used to fill in the downstream plunge pool.

The third full paragraph on page III-15 is revised as follows:

#### Dam Removal

Niles Dam would be lowered to an elevation of approximately 108.4 feet, which is the estimated historic pre-dam bed elevation and is 6.9 feet below the dam crest (see Figure 9). However, the actual height of the dam is not known with certainty, and therefore the depth of removal could be greater than 6.9 feet. The limits of dam removal would be established during predemolition surveys. In addition, the left abutment would be removed in its entirety, and as much of the right abutment as geotechnically feasible (to accommodate the bankfull channel and the floodprone width; Weiss Associates, 2004) would be removed and the aqueduct plugged (see Figure 10). Portions of the right abutment are adjacent to SR 84 and may contain a short segment of the Vallejo Aqueduct. Only that portion of the Vallejo Aqueduct within the abutment to SR 84 may be removed (see Figure 4). Between 200 and 800 cy of sediment stored behind Niles Dam would be used to fill in the downstream plunge pool.

- B2-8 See response to comment B2-1.
- B2-9 The SFPUC will provide a copy of the draft Data Recovery Plan to Caltrans for review when available.
- B2-10 See response to comment B1-2.

The description for Niles Dam is repeated twice because the summary paragraph on page I-8 in Chapter I of the DEIR does not contain references to figures, while the paragraph on page III-15 in the DEIR does.



#### ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT

100 NORTH CANYONS PARKWAY, LIVERMORE, CA 94551

PHONE (925) 454-5000

November 18, 2005

Mr. Paul Maltzer, Environmental Review Officer San Francisco Planning Department 30 Van Ness Avenue, Suite 4150 San Francisco, CA 94103

Re: Draft Environmental Impact Report for the Sunol/Niles Dam Removal Project

Dear Mr. Maltzer:

Zone 7 has reviewed the referenced CEQA document in the context of Zone 7's mission to provide drinking water, non-potable water for agriculture and irrigated turf, flood protection, and groundwater and stream management within the Livermore-Amador Valley.

This project is located in unincorporated Alameda County and proposes to partially remove Sunol and Niles Dams. This project site is outside of the Livermore-Amador groundwater basin. The Sunol and Niles Dams are located on Zone 7's Special Drainage Area 7-1 Authorized Project Line A. Zone 7's Stream Management Master Plan (SMMP) Interim Report has a recommended project of constructing a trail in this reach. Based upon our review, your project is not expected to impact our existing facilities or the Zone 7's proposed SMMP project in this reach.

We appreciate the opportunity to comment on this document. If you have any questions or comments, please feel free to contact me at (925) 454-5036 at your earliest convenience.

Sincerely.

Mary Lim // (

Environmental Services Program Manager

cc: Karla Nemeth, Environmental & Public Affairs Manager, Zone 7

David Houts, Staff Analyst, Zone 7 Joe Seto, Senior Engineer, Zone 7

### C. Response To: Mary Lim, Alameda County Flood Control and Water Conservation District – Zone 7, November 18, 2005

C-1 This letter acknowledges that Zone 7 has a proposed trail in this reach and that the project as proposed is not expected to affect existing facilities or the proposed trail. No response is required.



## COUNTY OF ALAMEDA PUBLIC WORKS AGENCY

399 Elmhurst Street • Hayward, CA 94544-1395 (510) 670-5480

December 7, 2005

Mr. Paul Maltzer Environmental Review Officer Sunol/Niles Dam Removal Project San Francisco Planning Department 30 Van Ness Avenue, 4th Floor San Francisco, CA 94103

Dear Mr. Maltzer:

Subject: Comments on San Francisco Public Utilities Commission Sunol/Niles Dam Removal Project EIR SCH#2004072049

The Alameda County Flood Control and Water Conservation (District) has reviewed your draft Environmental Impact Report (dEIR) for the subject project. Per your dEIR, the San Francisco Public Utilities Commission (SFPUC) proposes to remove portions of the historic Sunol and Niles Dams to allow fish passage and to address liability and public safety issues. In association with the removal of the dams, impounded sediment would either be left in place or would be off-hauled except for a portion of the sediments to fill in the plunge pools downstream of each dam. The project would require the following approval: (CDFG, Streambed Alteration Agreement; SFRWQCB Water Quality Certification or Waiver of Waste Discharge Requirements under Section 401 of the Federal Clean Water Act, or Porter Cologne; U.S. Army Corps of Engineers Nation Wide Permit and Caltrans Encroachment Permit.

The proposed project is located in Niles Canyon along Alameda Creek, which runs parallel to Niles Canyon Road (Highway 84). The Sunol Dam is located at River Mile 16.2 and Niles Dam is located at River Mile 12.8 near the downstream end of the Niles Canyon. Both dams are directly upstream of that portion of Alameda Creek that is owned, operated, and maintained by the District.

The District asserts that the project impact and potential impacts identified in your dEIR have not been adequately addressed or mitigated. The District's concerns are identified in the following comments:

#### Comment 1

The Environmental Settings section of the dEIR is incomplete. This section failed to describe the downstream area of the project; however, elsewhere in the document potential effects on the downstream area if the silt is not removed are discussed. Please revise the environmental setting Page IV.A-1 to reflect the areas that would be affected by the proposed project. This is important, as the proposed project's impact is not limited to the immediate location and vicinity.

#### Comment 2

Your document states on Page III-13 and Page III-19: "The estimated volume of sediments behind Sunol and Niles Dams is 39,200 cy. After the dam is removed, sediment that is not used to fill in the downstream plunge pool or for general recontouring in the area would be left in place to move downstream naturally over a period of several decades."

Leaving the silt in the creek to wash downstream would be inconsistent with the project objective as discussed on Page 5 Item One of the Initial Study, which states: "Remove barriers to fish passage in keeping with ACFRW goal of restoring a self-sustaining population of steelhead to Alameda Creek, while recognizing other beneficial uses (e.g., water supply and flood control)."

The District is extremely concerned about leaving that much silt in the creek to be transported downstream. Nearly all of the downstream reach of Alameda Creek passes through highly urbanized areas that, until construction of the Federal Project, were subjected to frequent flooding. These flood facilities require regular maintenance including costly dredging. Recent dredging of about a 3/4 mile segment of the federal project cost the District nearly \$4 million, plus an additional \$4.5 million in mitigation costs. It took the District nearly 5 years to obtain all the necessary permits in order to begin the work.

To allow this volume of silt to be transported downstream could result in major maintenance issues for the District. On Page 9 of the Initial Study, Appendix A, it is noted that "...any sediment left in place after the dam removal could be deposited in the flood control channel downstream of Niles Dam and that significant deposition could increase the risk of flooding along the lower reaches of the creek." The District agrees with the assessment of the significance of leaving the silt to wash downstream. We, therefore, request that the silt be excavated and transported to an upland disposal site.

Since the volume of silt that would be left in the channel is a significant impact, an appropriate feasible mitigation to reduce this impact to less than significant is required in accordance with CEQA (15126.4(a) and Clean Water Act Section 404(b)(1) Guidelines. No mitigation measure has been proposed, nor has this issue been included under Irreversible Environmental Changes (Chapter VII, Page VII-1) of the EIR and in the Initial Study.

#### Comment 3

Several endangered species identified to occur or potentially occur at the project site would be impacted, as identified on pages IV.D.27 and IV.D.28. The District believes the mitigations D.4.a and b, offered for these impacts, are inadequate. Removing the dams would reduce the impoundment behind each dam and therefore, affect red-legged frog habitat both temporarily and long-term. This significant impact to the red-legged frog (and also to the other species known to occur in the project site) requires compensatory mitigation. Loss of habitat, permanent or temporary, requires mitigation. Although enhancement of SFPUC-owned lands as a possible mitigation for impacts to red-legged frogs was discussed on Page V-8, there is no guarantee that this will be done since that discussion is conditioned on discovery of the species during monitoring of a pond at an unspecified time.

#### Comment 4

Archival documentation of this historic resource may not be adequate mitigation. On Pages IV.G-14, Paragraph 4, and Page V-15, Mitigation Measure G-1b, the District recommends that portions of the structure of the dams be salvaged and installed near the site and/or at an appropriate repository along the creek corridor accessible to the public and a plaque installed where the dam was.

#### Comment 5

- a. The EIR requires a list of acronyms as used in the document.
- b. The Checklist Items of the Initial Study, Appendix A, require revisions to:
  - i. Page 29, Item #10, Water, (c) cause substantial flooding, erosion or siltation. This item should be checked *Yes*.
  - ii. Page 32, Item E, Mandatory Findings, #4: Would the project cause substantial adverse effects on human beings either directly or indirectly? This item should be checked Yes.

In summary, in a meeting with SFPUC representative, Barbara Palacios, on Wednesday, November 30, 2005, the District strongly expressed its preference for SFPUC to remove the silt during this project construction. One reason is that it is more cost effective for SFPUC to remove the silt to an upland disposal site during the dam removal process. Secondly, our experience dictates that dredging as necessary for this type of project is very expensive and will take several years to be approved by the regulatory agencies. If the silt is left for the County to remove, it will create a significant financial impact well in excess of \$1 million and may pose a health and safety threat until such time the various regulatory agencies complete the permitting process.

Although the District continues to support the efforts to improve the aquatic habitat in the County, the issues raised above pose a significant threat of liability that needs to be addressed immediately. The District appreciates the opportunity to comment on your dEIR. Please contact Mr. Kwablah Attiogbe at (510) 670-5772 if you need additional information.

Yours truly,

Moneld J. LaBelle
Donald J. LaBelle

Director of Public Works

#### DJL/KA/pr

c. Daniel Woldesenbet, Assistant Agency Director
George Sukkar, Deputy Director, Engineering and Construction
Hank Ackerman, Flood Control Manager
Dale Bowyer, SFRWQCB
Mark D'Avignon, USACE
Robert W. Floerke, Dept. of Fish & Game
State Clearinghouse Office of Planning & Research

# D. Response To: Donald J. LaBelle, County of Alameda Public Works Agency, December 7, 2005

- D-1 The comment requests the project setting on pages IV.A-2 IV.A-3 be revised to include a discussion of the area downstream of the project. Section IV.A discusses the plans and policies applicable to the project area and as such, the description on pages IV.A-2 IV.A-3 adequately identifies the plans and surrounding land uses. Other sections of the DEIR identify the project setting with respect to potential impacts. As noted in the DEIR on page IV.F-31 (and supported by the Weiss Associates study, Appendix B in the DEIR), the flood risk impacts associated with mobilization of the impounded sediment are expected to be less-than-significant because of the expected gradual nature of sediment movement and the relatively small percentage of impounded sediment volume to annual sediment load in the creek. Therefore, the DEIR adequately describes the environmental setting of the proposed project.
- D2-a As stated in the DEIR on pages IV.F-29 IV.F-31, sediments would be expected to be transported downstream gradually and be deposited and stored throughout Niles Canyon. Sediment would eventually be transported downstream to the flood control channel; some sediment would be deposited in the channel and would require subsequent removal. However, given the expected gradual nature of the sediment movement and the relatively small percentage of impounded sediment volume compared to annual sediment load in the creek, as stated on pages IV.F-30 IV.F-31, the flood risk impacts are expected to be less-than-significant. Thus, the project as described in the DEIR is consistent with project objective #1. As stated in the DEIR on page IV.F-7, the high percentage of gravel in the impounded sediments indicates that there are a low percentage of fines in the sediments available for suspension in the flow.
- D-2b See response to comment D2-a. At the time of the release of the Initial Study (see Appendix A in the DEIR) on July 9, 2004, the Trihey & Associates report (2000) referenced in the Initial Study and comment D-2b was the most current information available. Subsequent to the release of the Initial Study, the SFPUC contracted with Weiss Associates (see Appendix B in the DEIR) to evaluate the potential for adverse impacts to channel geomorphology (including sediment transport). The Weiss Associates study was considerably more extensive than the Trihey & Associates study and included the survey of Niles Canyon, review of historical flow and sediment records, and computer modeling of the fate of sediments. As noted on pages IV.F-30 - IV.F-31 of the DEIR, two sediment transport studies (the Trihey and Weiss reports) assessed the fate of sediments stored at Sunol and Niles Dams after dam removal. The conclusion of the more recent Weiss Associates report (October 2004), which re-evaluated the Trihey & Associates report, is that the expected gradual nature of the sediment movement, attenuated by storage in the creek beds, bars, levees and banks throughout Niles Canyon, results in the conclusion that sediment would arrive in the flood control channel over the course of decades. Further, the estimated volume of sediment stored behind the dams is

well below the average annual load of the river and within the natural variability of sediment transported by the creek. These two findings of the Weiss Associates study lead to the conclusion that the impact of allowing the sediment to erode naturally is less-than-significant with regard to flooding risk (page IV.F-31 in the DEIR).

- D-2c As noted on page IV.F-31 in the DEIR, the impact of sediment movement is less-than-significant. Mitigation measures are not required for less-than-significant impacts (CEQA Guidelines 15126.4[a][3]); thus, none were proposed. Since there is a less-than-significant impact, there is no need to include a discussion under 'Significant Irreversible Environmental Changes.' See response to comments D-2a and D-2b for further detail.
- D-3 As noted in the DEIR on page IV.D-18, CRLF were found in only one large pond adjacent to the access road to Sunol Dam. The DEIR recognizes that, in addition to the reasonable and prudent measures contained in the Programmatic Biological Opinion (PBO) and included as Mitigation Measure D-4a, additional mitigation measures are necessary (page V-6, Mitigation Measure D-4b) and that consultation with the USFWS is necessary to establish those additional measures. For this project, the U.S. Army Corps of Engineers (Corps) has initiated formal consultation with the U.S. Fish and Wildlife Service (USFWS). Terms and conditions from the USFWS' Biological Opinion will become conditions of the Corps permit for this project. The DEIR is revised to clarify Mitigation Measure D4-b.

Mitigation Measure D4-b on pages I-18 and V-8 is revised as follows:

D-4b Consultation with USFWS. The SFPUC will consult with the USFWS to establish additional reasonable and prudent measures to avoid CRLF take and mitigation for temporary and permanent impacts to CRLF habitat. To this end, the SFPUC submitted a biological assessment to the Corps and USFWS on March 10, 2005. The Corps and the SFPUC are in consultation at this time. These measures will be implemented in addition to those measures implemented under Measure D-4a.

The statement that enhancement of SFPUC lands as a possible mitigation measure for the CRLF is conditioned on discovery of the species during monitoring of a pond at an unspecified time is incorrect. CRLF are known to occur in a pond adjacent to the access road to Sunol Dam (see pages IV.D-12, IV.D-18, IV.D-19, and IV.D-29 in the DEIR). The timing of monitoring is noted as being after dam removal activities are completed and for a period of two years (page V-7, last bullet). Enhancement of SFPUC lands would be conducted if a permanent loss of CRLF aquatic breeding habitat occurs. As part of implementing Mitigation Measure D-4b, the SFPUC met with representatives from the USFWS on December 12, 2005 and agreed that the monitoring period will increase from a two-year period to a five-year period; therefore, the DEIR is revised to reflect this change.

The sixth bullet on page I-17 and the last bullet on page V-7 is revised as follows:

- Monitoring. The SFPUC will monitor the pond adjacent to the Sunol Dam access road for the first two five years after dam removal to determine the effects of lowering groundwater levels on CRLF. Monitoring will include protocol habitat assessment for CRLF. The monitoring area will include the pond and the project reach of Alameda Creek.
- D-4 Please see response B2-5 and the discussion of the development of the Memorandum of Agreement (MOA) in response to comment B2-2. In the process of writing the MOA, if the signatories (the State Historic Preservation Officer and the Corps) agree that signage and a restored element of the dams will further resolve the impacts to the dams, they will be included in the MOA or the ARD/DRP if the material is not needed for curation or education purposes under Section 106 of the National Historic Preservation Act. Even if signage and a restored element occur, the impact would not be reduced to a less-than-significant level.
- D-5 a. The DEIR is revised to include an appendix with a list of acronyms (see Chapter III of this document for the list of acronyms).
  - b. Items in the Initial Study checklist cannot be retroactively changed once the public review period ends. With respect to flooding, erosion, and siltation, the discussion on pages 29 and 30 of the Initial Study checklist clearly states that the EIR will evaluate these issues. Also, with respect to Item E, Mandatory Findings of Significance, #4 (page 32 of the Initial Study checklist), the statement is made that the "EIR would discuss the above mandatory findings in detail."
- D-6 The comments regarding the preference of the County of Alameda Public Works
  Department to have the SFPUC remove the sediment do not address the adequacy of the
  DEIR. No response to that portion of the comment is required. The flood risk impacts
  associated with the removal of Sunol and Niles Dams are expected to be less-thansignificant (page IV.F-31 in the DEIR).



DIRECTORS
MARTIN L. KOLLER
President
JUDY C. HUANG
Vice President
JAMES G. GUNTHER
ARTHUR LAMPERT
JOHN H. WEED

43885 SOUTH GRIMMER BOULEVARD • P.O. BOX 5110, FREMONT, CALIFORNIA 94537-5110 (510) 668-4200 • FAX (510) 770-1793 • www.acwd.org

PAUL PIRAINO
General Manager
ROBERT SHAVER
Engineering Manager
KARL B. STINSON
Operations Manager
WILLIAM J. ZENONI
Finance and Administration Manager

December 7, 2005

Mr. Paul Maltzer, Environmental Review Officer Sunol/Niles Dam Removal Project San Francisco Planning Department 30 Van Ness, Suite 4150 San Francisco, CA 94103

Dear Mr. Maltzer:

Subject: ACWD Comments on the Draft EIR for the Sunol/Niles Dam Removal Project

Alameda County Water District (ACWD) is pleased to have the opportunity to comment on the Draft EIR for the Sunol/Niles Dam Removal Project. ACWD is a water retailer that provides potable water to a population of over 322,000 in the Cities of Fremont, Newark and Union City. Although variable depending on hydrologic conditions, ACWD relies on the Alameda Creek Watershed to provide more than 30,000 acre-feet per year of local and imported water for groundwater replenishment. This water recharges the Niles Cone Groundwater Basin (downstream of the Niles Canyon) through percolation both in Alameda Creek and adjacent percolation ponds. This water is subsequently recovered through ACWD's groundwater production wells and distributed as a potable supply to the District's customers. In addition, ACWD is also a wholesale customer of the SFPUC, and receives approximately 30% of our total supply form the Hetch-Hetchy system.

ACWD has a strong interest in protecting and preserving the quality of water in the Alameda Creek watershed. The SFPUC policies and programs as they relate to watershed issues in the Alameda Creek watershed are of special interest to ACWD. As you may know, ACWD has maintained a long term commitment to watershed protection and to assuring the health and safety of water supplies on which our customers depend.

Based on our review of the Draft Environmental Impact Report for the Sunol/Niles Dam Removal Project we have the following specific comments.

1. Section IV.F - Hydrology, Groundwater and Water Quality: The EIR should evaluate potential impacts on ACWD's water supplies due to potential increases in turbidity as the sediment currently behind the dam is carried downstream over the next several decades. The

Mr. Paul Maltzer Page 2 of 3 December 7, 2005

SFPUC should monitor turbidity and be prepared to mitigate in the event that ACWD can not divert to recharge because of the project's turbidity impacts.

- 2. In order to meet summer peak water demands from the Niles Cone groundwater basin, ACWD has the Department of Water Resources (DWR) routinely release, into the Alameda Creek watershed near the community of Sunol, a continuous flow of water from the State Water Project South Bay Aqueduct Vallecitos Turnout during the period June 1 through about October 15 of each year. The rate of this water flow is typically about 30 cubic feet per second. Prior to start of the dam removal project work, SFPUC should commit to passing all of this water past the project locations during the dam removal project work. In the event that SFPUC cannot make this commitment and ACWD does not receive the needed SWP water through Alameda Creek, SFPUC should mitigate by providing ACWD with an alternate comparable source of water supply. Also, please be advised that ACWD has no control over the regulation of other water flow in Alameda Creek such as from rainstorm runoff, dam releases, permitted releases, and other municipalities & agencies operations.
- 3. Pages I-21, I-22, V-13, and V-14: While the mitigation measures stated in section F-1a seem adequate for a stormwater pollution prevention plan to protect Alameda Creek water quality, we stress the importance of adhering to BMPs which also minimize adverse the impacts to the quality of ACWD waters. We request that the fifth bulleted item needs to be changed to read: "Refueling and maintenance of equipment and vehicles will be conducted outside of the creek floodplain. All refueling and maintenance activities involving hazardous materials shall include provision for secondary containment."

Also, a new bulleted item needs to be added to read: "All equipment, containers, and vehicles containing hazardous materials shall be relocated to an area outside of the creek floodplain at the end of each work day."

- 4. Page II-6 Background: In the third paragraph, the statement "...there are four barriers to upstream migration of adult steelhead." needs to be revised to recognize the fact that the three inflatable dams are not barriers whenever they are deflated.
- 5. Page III-11 Access and Roads: In the third paragraph, there is the statement "Temporary access from SR84 could also be obtained by cutting an access road to the right bank of the creek (looking downstream)." Also, presumably this same access is shown as "POTENTIAL ACCESS RD" delineated on Figure 8. The area shown is most probably over land identified as 7075 Niles Canyon Road, Assessors Parcel Number 96-135-2, which is owned in fee title by ACWD. Use of this property for the SFPUC project work will require a written agreement with ACWD.
- 6. Page IV.A-3 Plans and Policies: The EIR should include a description of ACWD's Groundwater Management Policy since this policy serves as the basis for the ACWD groundwater management activities, including source water protection. A copy of this policy is included as an attachment to this letter.

Mr. Paul Maltzer Page 3 of 3 December 7, 2005

- 7. Page IV.C-1 Water Supply and Sewerage Systems: The first paragraph needs to be read: "The Alameda County Water District (ACWD) supplies potable water to the Cities of Fremont, Newark, and Union City which are located in the southern portion of Alameda County, including water users in the vicinity of the Niles Dam portion of the project area. An annual average of about 49 million gallons per day (mgd) of potable water is supplied to ACWD customers. The ACWD obtains water from three sources: the State Water Project (SWP), the SFPUC Hetch Hetchy System, and Alameda Creek watershed runoff. Two facilities for water treatment, the Mission San Jose Water Treatment Plant and Water Treatment Plant Number Two, are maintained by ACWD. The plants have a combined treatment capacity of about 31 mgd."
- 8. Page IV.C-2 Recreation (Swimming Facilities): The EIR does not describe the Quarry Lakes Recreational Area and the swimming facilities at this location. This is especially important since the source of water for Quarry Lakes (i.e. Alameda Creek) may be impacted by the proposed project.
- 9. Page IV.D-7: Aquatic Habitat Alameda Creek: The description of increased pool temperatures in Niles Canyon implies that this is due, in part at least, to ACWD's SBA water releases. Water temperature data collected by Hanson Environmental ("Air and Water Temperature Monitoring Within Alameda Creek: 2001-2002" October 1, 2002 Revised) in Niles Canyon has shown no summertime differences in Niles Canyon due to the SBA releases. (i.e. the SBA releases are at the same temperatures as the base flows coming down Arroyo de Laguna).

If you have any questions regarding this letter, please contact Jim Reynolds at (510) 668-6511. Thank you again for the opportunity to comment on the Draft EIR.

Sincerely,

Paul Piraino General Manager

Attachment

jrr

## E. Response To: Paul Piraino, Alameda County Water District, December 7, 2005

E-1 As stated in the DEIR on pages IV.F-30 – IV.F-31, the volume of sediment is within the normal range of variability of sediment annually transported by the creek and that the sediment is expected to move in a dispersional manner. Turbidities in the creek would not vary significantly from current and historical turbidity levels in the vicinity of Alameda County Water District's (ACWD) diversion dams with the implementation of the proposed project. Furthermore, increased turbidity, within Alameda Creek is experienced during the winter rainy season when ACWD is not recharging groundwater. See also response to D2-a.

During demolition there is a potential for turbidity increases; however, mitigation measures are proposed in the DEIR to reduce this impact to less-than-significant levels (pages V-13 – V-15). It is not expected that demolition-generated turbidity would travel down over five miles to the ACWD's area of recharge.

- E-2 No significant impact on turbidity levels near ACWD's recharge area is identified in the DEIR that would require such monitoring. Also, see response to E-1.
- E-3 As stated in the DEIR on pages III-4 III-5 and III-14 III-15, the SFPUC has committed to divert Alameda Creek around the work area and discharge the water below the work area. On page 9 of the Initial Study checklist (Appendix A in the DEIR), the estimated flows to be diverted are between 50 60 cubic feet per second (cfs), which account for the 30 cfs of water from the State Water Project South Bay Aqueduct.
- E-4 See response to comment E-3. As noted in response to comment E-3, the SFPUC will bypass all Alameda Creek flows around the project sites; this flow is expected to be 50 60 cfs. Bypassed water would be returned to Alameda Creek downstream of the demolition area.
- E-5 As the comment notes, the SFPUC has included a number of best management practices (BMPs) to protect water quality. As stated on page III-13 of the DEIR, equipment could be left onsite, but out of the active channel at the end of each workday. During the course of demolition, it may be necessary to conduct refueling and maintenance of equipment within the dewatered area to minimize schedule delays associated with refueling and maintenance. If equipment and/or materials are to be left within the dewatered area of Alameda Creek at the end of a workday or over a weekend during demolition activities, a containment system (e.g., temporary berms) would be installed around equipment and/or materials to prevent the accidental release of hazardous materials into Alameda Creek. In addition, secondary containment, such as a drain pan or drop cloth, to catch spills or leaks would also be used. Spill cleanup kits would be located onsite, and all diversion structures and pumps (if necessary) would be inspected before the end of the workday to ensure their proper functioning. Mitigation Measure F-1a minimizes the potential for a

significant impact on water quality. However, in response to the comment, the DEIR is revised to clarify Mitigation Measure F-1a, fifth bullet.

The second bullet from the top of page I-23 and fifth bullet from the top of page V-14 is revised as follows:

Refueling and maintenances of vehicles will be conducted outside of the creek floodplain wherever practicable. All refueling or and maintenance activities involving hazardous materials shall should include provision for secondary containment.

- E-6 See response to comment E-5 above. Although the proposed bulleted item was not added, the mitigation measures identified on pages V-12 V-15 in the DEIR would reduce water quality impacts to less-than-significant levels. In addition, there are mitigation measures proposed as part of the project such as under Biological Resources on page V-4 and Hydrology, Groundwater, and Water Quality on pages V-12 V-13.
- E-7 The DEIR is revised to clarify that when the inflatable dams are deflated, they do not act as migrational barriers.

The bottom of page II-5 and the top of page II-6 is revised as follows:

Portions of the Alameda Creek watershed, comprising about 633 square miles, once supported viable runs of anadromous fish. According to research conducted by the Alameda Creek Fisheries Restoration Workgroup, in which the SFPUC participates, steelhead are currently prevented from reaching the middle and upper reaches of Alameda Creek because of the presence of downstream migration barriers. In the area where Alameda Creek is a flood control channel (see "Alameda Flood Control Channel" in Figure 2), there are four barriers (the inflatable dams are not barriers when deflated) to upstream migration of adult steelhead. The four barriers, owners, and approximate locations are:

- Lower inflatable dam, Alameda County Water District, quarry ponds
- BART weir, Alameda County Flood Control District, quarry ponds/BART crossing
- Middle inflatable dam, Alameda County Water District, quarry ponds
- Upper inflatable dam, Alameda County Water District, quarry ponds
- E-8 The commenter is correct that if the SFPUC uses the access road shown on Figure 8 in the DEIR a written agreement with the ACWD would be required. Page III-20 of the DEIR is revised to include the ACWD in the list of Approvals/Permits Required.

Item #5 is added to page III-20 as follows:

5. Alameda County Water District written agreement

E-9 The DEIR is revised to include the ACWD Groundwater Management Policy in Chapter IV A, Plans and Policies.

Following the discussion of the San Francisco General Plan and before the Impacts discussion on page IV.A-8, the following text is added to the DEIR:

#### **Alameda County Water District**

#### **Groundwater Management Policy**

This policy protects and manages the Niles Cone Groundwater Basin.

Programs are developed and implemented in response to this policy. The following objectives are included in the Groundwater Management Policy:

- Increase groundwater replenishment capability
- Increase the usable storage capacity of the groundwater basin
- Operate the basin to provide: (1) a reliable water supply to meet baseload and peak distribution system demands, (2) an emergency source of supply, and (3) reserve storage to augment dry year supplies.
- Protect groundwater quality from degradation from any and all sources including: saline water intrusion, wastewater discharges, recycled water use, urban and agricultural runoff, or chemical contamination.
- Improve groundwater quality by (1) removing salts and other contaminants from affected areas of the basin, and (2) improving the water quality of source water used for groundwater recharge.

The following reference is added to page IV.A-10:

Alameda County Water District, Groundwater Management Policy, last amended March 22, 2001.

Because of the above addition to the DEIR, the following paragraph is added to the DEIR on page IV.A-9.

The following text is inserted after the fourth paragraph under 'Project Consistency with Policies' on page IV.A-9:

The Alameda County Water District policies related to Groundwater Management focus on improving the storage capacity and water quality of the Niles Cone Groundwater Basin, which encompasses an area to the west of Niles Dam and outside of the project area (San Francisco Bay Regional Water Quality Control District, 2006). Implementation of the project would not conflict with these goals. Measures to minimize impacts to water quality during demolition are included in Chapter V, Mitigation Measures, under Section IV.F, Hydrology, Groundwater, and Water Quality.

The following reference is added to page IV.A-10:

San Francisco Bay Regional Water Quality Control District website, South

Bay Groundwater Protection Evaluation Report, Figure 5. Available
online at http://www.swrcb.ca.gov/rwqcb2/sobayground.htm,
accessed February 2, 2006.

E-10 The DEIR is revised to include the recommended clarifications to the text on page IV.C-1.

The second paragraph on page IV.C-1 is revised as follows:

The Alameda County Water District (ACWD) supplies <u>potable</u> water to <u>the Cities of Fremont</u>, Newark, and Union City, which are located in the <u>southern portion of southern</u> Alameda County, including water users in the vicinity of the <u>Niles Dam portion of the project area</u> (ACWD, 2004). An <u>annual</u> average of 49.02 million gallons per day (mgd) of <u>potable</u> water is supplied to ACWD customers. The ACWD obtains water from three sources: the State Water Project (SWP), the SFPUC Hetch Hetchy System, and Alameda Creek watershed runoff. Two facilities for water treatment, the Mission San Jose Water Treatment Plant and Water Treatment Plant Number Two, are maintained by ACWD. The plants have a combined treatment capacity of <u>about 31</u> 9.5 mgd.

E-11 The Quarry Lakes would not be affected by this project; however, the DEIR is revised to include a discussion of the swimming facilities at Quarry Lakes Recreational Area.

The following text is added to the DEIR at the top of page IV.C-3 before the Impacts discussion:

In Fremont, the East Bay Regional Park District (EBRPD) operates Quarry Lakes Recreation Area at 2100 Isherwood Way. This recreation area was created through a joint effort between EBRPD and ACWD. Facilities include a swim beach that is open from April to October (East Bay Regional Park District, 2006).

The following reference is added to page IV.C-4:

East Bay Regional Park District website. Available online at <a href="http://www.ebparks.org/parks/quarry.htm">http://www.ebparks.org/parks/quarry.htm</a>, accessed January 9, 2006.

E-12 Comment noted. The second paragraph on page IV.D-7 in the DEIR is revised to reflect the more recent water temperature study of Alameda Creek.

The second paragraph on page IV.D-7 is revised as follows:

Prior to the development of water conveyance facilities, such as reservoirs and diversions, Alameda Creek, in Niles Canyon, was likely an intermittent to perennial stream characterized by low flows during late summer and fall (Buchan et al., 1999). Aquatic habitats within Niles Canyon likely functioned as a migratory corridor for anadromous fishes such as steelhead, lampreys,

and probably salmon (Buchan et al., 1999). However, construction and operation of fish migration barriers, such as the Calaveras and Turner Dams, have prevented anadromous fishes migrating through Niles Canyon from reaching high-quality, cold water habitat (Buchan et al., 1999). Reduced flows from the reservoirs have also decreased successful smolt migration out to San Francisco Bay. Finally, ACWD augments summer flows, particularly summer releases from the South Bay Aqueduct into Niles Canyon. As a result, summer base flows in Niles Canyon have become less variable, thereby increasing pool temperatures and reducing rearing habitat (Buchan et al., 1999). However, although the stream temperatures within the reach are probably higher than pre-development flows, augmented flows potentially provide atypical fast-water habitat that may allow trout to obtain sufficient food to withstand warmer temperatures (Gunther et al., 2000).



Development and Environmental Services Department Planning 39550 Liberty Street, P.O. Box 5006, Fremont, CA 94537-5006 www.fremont.gov

December 7, 2005

Mr. Paul Maltzer Environmental Review Officer Sunol/Niles Dam Removal 30 Van Ness, Suite 4150 San Francisco, CA 94103

Dear Mr. Maltzer:

On behalf of the City of Fremont, this letter provides comments on the Draft Environmental Impact report for the Sunol / Niles Dam removal project, Case No. 2001.1149E:

- 1) The draft EIR discusses the partial removal of Niles Dam in some sections and in others it indicates the complete removal of the Niles Dam. On page VIII-2, it indicates that the proposed project would remove all of Niles Dam; if it is determined the right abutment can be removed without dostabilizing the retaining wall along SR 84. However, Figure 10 indicates that there will be a remaining right abutment and a small portion of the Niles Dam.
  - a. Please provide an illustration specifically indicating what portions (if any) of the Niles Dam are going to remain.
  - b. On page V-15, it states that "the Archaeological Research Design / Data Recovery Plan will identify the means necessary to preserve the defining characteristics of the resource, Vallejo Dam and Aqueduct, in terms of eligibility for listing in the NRHP / CRHR". Yet, on page V-16, it states that "the ARD / DRP will determine the conditions that need to be met to allow for the full-scale demolition of the dam to be completed". Is the intent to retain specific character defining features of the Niles Dam so that the Dam could remain eligible for the NRHP or to remove the entire dam?
  - Will the Vallejo Aqueduct be completely removed? The document is unclear.
- 2) Please provide a figure, which shows the exact location of the Niles Dam and the Sunol Dam at a more readable scale, Figures 1 and 2 provide a general overview of the project location but are not helpful in providing an accurate location.
- 3) There are numerous sections throughout the document, which state that the removal of the Niles and Sunol Dams are necessary for public safety reasons. In addition, it is stated that "although the project would remove an unsanctioned recreational resource, it is assumed that the project's fish passage and public safety benefits are consistent with the spirit and intent of the Fremont General Plan". Please provide the accident record to date to

Planning

510 494-4440



substantiate the existing public safety hazards and related San Francisco Public Utilities Commission (SFPUC) risk management statements that are made throughout the document.

- 4) Under the Historical Resources section on page IV.A-8: it states "no local registries or historic resources (e.g., maintained by the City of Fremont or Alameda County) have identified resources within the project area". The City of Fremont would like to point out that Vallejo Mills site is listed as a Primary Historic Resource in the City of Fremont's General Plan. This site should be referenced since it is historically tied to the Vallejo Mill / Spring Valley Water Conveyance System. As you know, the Vallejo Mill / Spring Valley Water Conveyance System is eligible for the NRHP under Criterion A for it association with agricultural / industrial development, as well as the evolution of urban water supply in San Francisco Bay Area. It is also eligible under Criterion D for its potential to yield important data regarding the design and construction techniques used in an early water transport system for a power source, and how the system was adapted from agri-industrial purposes to an urban domestic water-supply system. The Vallejo Mill site is a contributory feature to the Vallejo Mill / Spring Water Conveyance System.
- 5) Mitigation measure G-1a states that prior to demolition of Sunol and Niles Dams, the SFPUC will retain a qualified architectural historian who will document Sunol and Niles Dams in accordance with the Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) standards. In addition, a Niles Dam archaeological resources report will be developed as a mitigation measure. The City of Fremont Planning Department requests that copies of these reports be provided to us for our Historical Inventory Library. Information that may put at risk any archaeological resource will be protected from view by the public.

Thank you for this opportunity to comment. Please call me at (510) 494-4476 if you have any questions.

Sincerely,

Nancy Minicucci

Associate Planner

cc: Joff Schwob, Planning Director

Members of the Historical Architectural Review Board

# F. Response To: Nancy Minicucci, City of Fremont Development and Environmental Services Department - Planning, December 7, 2005

- F-1 Figures 9 and 10 in the DEIR show, to the extent feasible, the portions of Niles Dam that are proposed to remain after completion of the project.
- F-2 The intent of the proposed project is to take out as much of the dams as necessary to remove fish passage barriers and to reduce or eliminate an existing public safety hazard. The intent of Mitigation Measure G-1b (pages V-15 –V-16 in the DEIR) is to preserve the *data* from Niles Dam and aqueduct system that conveys the significance of the resource under Criterion D. For clarification, the DEIR is revised.

The first paragraph of Mitigation Measure G-1b on pages I-24 and V-15, is revised as follows:

G-1b Before the removal of the Niles Dam, the SFPUC will retain a qualified archaeologist, in consultation with a qualified architectural historian, to prepare and submit to the San Francisco Planning Department's Environmental Review Officer (ERO) for review and approval an Archaeological Research Design/Data Recovery Plan (ARD/DRP) prepared in accordance with the State Historic Preservation Office guidelines for archaeological research designs (California Department of Parks and Recreation, 1991). The principal objective of the ARD/DRP will be to delineate the assumptions, principles, and rules to be followed during the dam's removal. The ARD/DRP will identify the appropriate means necessary to preserve the data defining characteristics of the resource and those elements that convey the significance, of Vallejo Dam and Aqueduct; in terms of with respect to eligibility for listing in the National Register of Historic Places (NRHP)/California Register of Historic Resources (CRHR) under Criterion D. Demolition of the dam as proposed will render it, as an individual resource, ineligible for listing in the NRHP. Methods to preserve the context during the dam's removal include, but are not limited to:

F-3 As shown on Figure 22 of the DEIR, the Vallejo Aqueduct would not be completely removed; only the feature that connects the earlier diversion structure to the aqueduct would be affected by the removal of Niles Dam (see Figures 4 and 9 in the DEIR), but the extent to which the Mexican-era structure exists at the dam site is not currently known. However, the data recovery process under Mitigation Measure G-1a and G-1b on page V-15 in the DEIR would dictate the method of removal of the diversion structure from the aqueduct such that the aqueduct would be minimally affected. See also response to comment B2-7.

The DEIR incorrectly referred to Figure 21 on page IV.G-12 in the discussion of the Vallejo Aqueduct. The DEIR is revised to correct the reference.

The second sentence at the top of page IV.G-12 is revised as follows:

In addition, intact portions of the Vallejo Aqueduct were identified below the roadway (see Figure 22). The State Historic Preservation Officer (SHPO) has concurred with the eligibility of the Vallejo Mills/SVWC system for the NRHP (Scantlebury, 2004).

In addition, the fourth paragraph on page IV.G-13 of the DEIR is revised to clarify that only the portion of the Vallejo Aqueduct immediately associated with Niles Dam will be affected by the proposed project and not the entire aqueduct.

The fourth paragraph on page IV.G-13 is revised as follows:

The evaluation conducted by JRP (2000, 2003) concluded that Sunol and Niles Dams are individually eligible for the NRHP and, thus, the CRHR. Additional resources also evaluated and found to be eligible properties were the Sunol Valley Filter Beds, the Sunol Water Temple, the Sunol Aqueduct, the Niles Regulating Reservoir, and SVWC's Alameda Headquarters. With the exception of the headquarters, the above resources were determined to qualify as a historic district. As discussed above, research conducted by Caltrans (Scantlebury, 2004) concluded that the Vallejo Aqueduct also qualifies for the NRHP and CRHR (Criteria A and D). Among these resources, only Sunol and Niles Dams and theat portion of the Vallejo Aqueduct immediately associated with Niles Dam would be adversely affected by the proposed project.

- F-4 Figures 5 and 21 in the DEIR provide a more detailed location of Sunol Dam, while Figures 10 and 22 show a more detailed location of Niles Dam. These location figures are sufficient for purposes of the DEIR. Since there are risk management concerns with the two dams and both dams are known historic structures, the SFPUC and MEA want to minimize the potential for attracting the public to the structures.
- F-5 The SFPUC has documented numerous instances of trespassing, especially at Sunol Dam. Two cases that can be publicized are:
  - 1. *Christopher Rowe and Jason Smith:* These men were hit by a Union Pacific train on the trestle near the Sunol Dam.
  - 2. Troy Stultz v. CCSF, Alameda Superior Court no. H-155820: Mr. Stultz shattered two vertebra while swinging on a rope swing at Sunol Dam.

There are other instances of injuries that cannot be referenced, as the underlying reports are privileged and confidential.

F-6 See response to B2-1. Neither the Caltrans evaluation (Scantlebury, 2004) nor the JRP evaluation (JRP, 2003; conducted as part of this DEIR) included the Vallejo Mill site (CA-ALA-548H) as part of the extant Vallejo Mill/SVWC system and hence was not considered part of the extant historic properties potentially affected by the project. Further, CA-ALA-548H will not be adversely affected by the proposed dam removal. The DEIR is revised to reflect CA-ALA-548H as a City of Fremont Primary Resource.

The second paragraph on page IV.A-8 is revised as follows:

#### **Historical Resources**

Although primacy is given to historic park protection within the *Fremont General Plan*, Appendix I of the General Plan also provides a list of primary historic resources identified in City Council Resolution 5463 in 1982. No local registries of historic resources (e.g., maintained by the City of Fremont or Alameda County) have identified resources within the project area. Within the project vicinity, the Vallejo Mill site, CA-ALA-548/H, is listed as a Primary Historic Resource in the City of Fremont General Plan.

F-7 The SFPUC will provide the requested copies.



### LANDMARKS PRESERVATION ADVISORY BOARD

1660 MISSION STREET, 5TH FLOOR, SAN FRANCISCO, CA 94103-2414 TEL. (415) 558-6345 • FAX. (415) 558-6409

December 7, 2005

Mr. Paul Malter Environmental Review Officer San Francisco Planning Department 1660 Mission Street, Suite 500 San Francisco, CA 94103

Dear Mr. Malter,

On November 16, 2005, the Landmarks Preservation Advisory Board (Board) held a public hearing and took public comment on the Draft Environmental Impact Report (DEIR) for the San Francisco Public Utilities Commission Sunol/Niles Dam Removal Project dated October 24, 2005. After discussion, the Board arrived at the comments below:

- The Board urges the PUC to encourage the National Park Service to submit the Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) documentation to the Library of Congress as a permanent archival record of the dam.
- There was no distinction made in the drawings between the two periods of dam construction. The dams should be more clearly illustrated in the drawings.
- There is no discussion of the loss of the bodies of water and what those impacts will be.
- The document does not discuss the disposal of the material, other agency may want the material. As discussion of possible salvage and reuse is warranted.
- The document does not present an alternative that investigates retaining the dam while still allowing the fish to pass over it.
- If both dams must be removed, saving the abutments and the foundations would be an appropriate mitigation
- The document does not make a clear distinction between the methods of blasting and its impacts. This should be explained in further detail.

- Suggested mitigation: efforts should be made to remove the new dam in such a way as to not damage the Vallejo period dam.
- The graphics of the stream are difficult to understand. A section of the stream bed illustrating the different levels of the stream bed would be valuable in understanding the project.

The Board appreciates the opportunity to participate in review of this environmental document.

Sincerely,

M. Bridget Maley, President

Landmarks Preservation Advisory Board

# G. Response To: M. Bridget Maley, City and County of San Francisco Landmarks Preservation Advisory Board, December 7, 2005

- G-1 The U. S. Army Corps of Engineers will consult with the National Park Service on the adequate distribution of the HABS/HAER report.
- G-2 During the preparation of the DEIR, the Niles Dam was described and illustrated (Figure 4 in the DEIR) using the best information available to date. The earlier structure was referenced in the text of the DEIR (pages II-5, IV.G-5, IV.G-7, IV.G-8, and IV.G-11). Additional information may become available during site recordation, which will be conducted as part of Mitigation Measures G-1a, G-1b and G-2a (pages V-15 V-16 in the DEIR).
- G-3 As stated in the DEIR (page II-5, top of the page and page II-6, first full paragraph), Sunol and Niles Dams were once part of the SFPUC's water system within the Alameda Creek watershed; however, the dams are no longer in service; thus, the loss of backwater does not affect the ability of the SFPUC to provide water to its customers. The following sections of the DEIR also discuss the loss of the impounded (i.e., pool or backwater<sup>3</sup>) water behind the dams.
  - Page IV.C-4 notes that unsanctioned swimming occurs at both dams.
  - Page IV.D-29 notes that removing Sunol Dam to an elevation of about 194 feet above mean sea level would in effect lower the hydraulic head (i.e., the area of water impoundment behind Sunol Dam) along this reach of Alameda Creek by roughly 10 feet. Lowering the impounded area would have a direct effect on adjoining groundwater levels. In the vicinity of the ponds occupied by California red-legged frog (CRLF), it is reasonable to assume that an average reduction in groundwater levels would be 3 to 7 feet. Thus, post-Sunol Dam removal, seasonal marsh conditions in the ponds might not be maintained, thereby affecting the population of CRLF inhabiting these ponds. The potentially significant impacts to CRLF described above would be mitigable. Implementation by the SFPUC of Mitigation Measures D-4a and D-4b would reduce these impacts to a less-than-significant level.
  - Page IV.D-29 also notes that the pools upstream of each of the dams do not likely provide suitable breeding habitat for CRLF because these pools are approximately 3 to 5 feet deep, and substrate consists mostly of fine sediment and some gravel and small cobbles.
  - Page IV.D-31 notes that dam removal activities could lower groundwater levels and remove backwater areas that support riparian vegetation. As Alameda Creek and its bed and banks adjust to the new stream channel configuration, some riparian vegetation could be temporarily lost.

A backwater is a body of water created by a dam or other obstruction in a flowing body of water and may also be known as an impoundment.

- Pages IV.F-27 IV.F-28 note that the identified zones of riparian vegetation between Alameda Creek and the depressions and between Sunol Dam and the confluence of Alameda Creek with Arroyo de la Laguna could be indirectly affected by this change in groundwater conditions. Impacts associated with reduced groundwater could occur in the riparian habitat immediately adjacent to the current backwater of the dam. Riparian habitat is most pronounced upstream from Sunol Dam, along the bank between the dam and the depressions/access road, and extends beyond Forebay C and the confluence with Arroyo de la Laguna. This tract corresponds with alluvial gravel and soil deposits. The opposite side of the creek is essentially bedrock, and the effects of dam removal and groundwater response would be less pronounced in this area. Impacts to riparian habitat due to reduced groundwater levels are not considered major beyond the creek's confluence with Arroyo de la Laguna. Removing Sunol Dam would lower groundwater levels adjacent to Alameda Creek between the dam and the confluence with Arroyo de la Laguna. The lowered seasonal groundwater levels could adversely affect the stands of riparian vegetation that have developed in this zone. The impact to riparian habitat is significant but mitigable and is addressed in Chapter V, Mitigation Measures, under Biological Resources, Mitigation Measure D-9.
- Page IV.F-29 notes that the removal of Niles Dam would alter the groundwater in the shallow alluvial aquifer in the immediate vicinity of the dam. This impact would be most pronounced nearest the dam, where a drop in groundwater levels equivalent to that in the creek water level would occur. The lateral extent of influence would likely be bounded by the bedrock walls of the canyon; in other words, the shallow aquifer is not sufficiently extensive to absorb the water level drop. The result would be a general lowering of the water table upstream of the dam, approximate to and just beyond the current backwater effect (500 to 600 feet upstream). The maximum groundwater level reduction would be approximately 4.5 feet in the immediate vicinity of the existing dam wall abutments. This effect would propagate outwards, away from Alameda Creek, with diminishing influence upstream. Due to the limited lateral extent of the shallow aquifer, and the paucity of groundwater users and groundwater-dependent habitat, the effect of a localized reduced groundwater level is less-than-significant.

Reduced groundwater would indirectly affect the riparian habitat. This vegetative community is partially reliant on shallow groundwater. The greatest effect would be in the vicinity of the dam abutments and just upstream, where the expected drop in groundwater level would be most pronounced. The impact to riparian habitat is significant but mitigable and is addressed in Chapter V, Mitigation Measures, under Biological Resources, Mitigation Measure D-9.

• Page IV.G-14 notes that the removal of Sunol Dam would result in reduced groundwater levels that could extend upstream from the dam, which could decrease the average yield from the infiltration galleries and in turn reduce the quantity of water flowing through the Sunol Water Temple. The water flows are a character-defining feature of the Temple; inflows are the temple's reason for being, and complete dewatering could be viewed as a loss of resource integrity. However, it does not appear that the Water Temple would be completely dewatered as a result of the dam removal (see Section IV.F, Hydrology, Groundwater, and Water Quality, for a discussion of groundwater and the Sunol Water Temple); the expected reduction of inflows would not significantly affect those features of the Water Temple that convey its significance.

- G-4 Assuming the comment relates to disposal of dam materials, the disposal of materials will be detailed in submittals that are subject to concurrence by the State Historic Preservation Officer, in compliance with the National Historic Preservation Act, Section 106. Also, see responses to comments B2-2, B2-4 and D-4.
- G-5 See pages VIII-5 VIII-8 in the DEIR under the discussion for "Retain Dams, Install Fish Ladders and Safety Fencing." This alternative was considered and rejected because it would not achieve most of the basic project objectives:
  - Objective #1 might not be fully met because fish ladders could present challenges for fish passage, and fish passage would not be assured. On October 13, 2004, the National Marine Fisheries Service stated that, overall, demolition was preferred and the California Department of Fish and Game recommends that fish ladders be installed only when absolutely necessary (see DEIR page VIII-6).
  - As long as the dams remain in place, public safety is at risk and the City and County of San Francisco would be subject to risk management concerns. Safety fencing does not eliminate these public safety concerns, as the fences could be cut and access to the dam sites gained; thus, Objective #2 would not be met.
  - Although Objective #3 would likely be met with implementation of this alternative, it would result in the permanent loss of riparian vegetation on either side of the fence at both dams. In addition, the fences could impede wildlife movement.
- G-6 The dams are being removed only to the extent that allows fish passage and to reduce public access. In addition, a portion of the Niles Dam's right abutment would remain to ensure that SR 84 that is located above the dam is completely unaffected. Saving the full abutments and foundations would not meet the project's objectives. Also see responses to comments B2-7 and F-3.
- G-7 As stated in the DEIR on page III-9, one of the proposed dam removal methods is controlled blasting. This type of blasting targets a specific area, in this case, 3-foot layers of the dam face and would result in the *fracturing* (emphasis added) of the dam face. Once the dam is fractured, conventional equipment (e.g., excavators) would proceed to break apart the concrete for removal. The DEIR discusses the impacts of controlled blasting (see pages IV.D-30, IV.H-5, IV.H-8, V-2, V-10, and V-20).
- G-8 As stated in the DEIR on page IV.G-8, the Spring Valley Water Company first rebuilt and raised Niles Dam by capping Vallejo's original stone dam with concrete and replacing the wooden fish ladder with a concrete ladder. Therefore, it would be difficult to remove Niles Dam without affecting the Vallejo Dam. As noted in the responses to B2-7, F-3 and G-6, in order to allow fish passage, Niles Dam needs to be removed down to the historic pre-dam streambed elevation.
- G-9 Plan view and cross-sections of Sunol and Niles Dams are provided in Figures 3 and 4, respectively (pages III-2 and III-3, respectively) in the DEIR. The components of the dams mentioned in the text of the DEIR are labeled. Final plan and cross-sections views

of Sunol and Niles Dams are provided in Figures 7 and 9, respectively (pages III-10 and III-16, respectively). The cross-sections on Figures 7 and 9 show the existing dam elevations, final dam elevations, historic streambed elevations and include bankfull and floodprone widths, which determined the extent of dam removal to provide fish passage. A longitudinal profile of Alameda Creek from San Francisco Bay to approximately 13,000 feet upstream of Sunol Dam is provided with Figure 13 (page IV.F-3). Figures 14 and 15 (pages IV.F-8 and IV.F-9, respectively) show the natural bed slope of Alameda Creek through Sunol and Niles Dams respectively.



Alameda Creek Alliance PO Box 192 • Canyon, CA • 94516

(510) 499-9185

e-mail: alamedacreek@hotmail.com web site: http://www.alamedacreek.org

December 2, 2005

City & County of S.F. Dept. of City Planing

DEC 0 5 2005

OFFICE OF ENVIRONMENTAL REVIEW

San Francisco Planning Department Attention: Paul Maltzer Environmental Review Officer, Calaveras EIR 30 Van Ness Avenue, Suite 4150 San Francisco, CA 94103

Re: Comments on the DEIR for the Sunol and Niles Dam Removal Project

These are the comments of the Alameda Creek Alliance (ACA) on the Draft Environmental Impact Report (DEIR) for the SFPUC's Sunol and Niles Dam Removal Project (Project).

We enthusiastically support the SFPUC's dam removal project, as removal of these potential migratory fish passage barriers will be an important step in restoring steelhead to Alameda Creek.

We have three issues of concern regarding the proposed Project.

The first concern is regarding the extent of the proposed removal of Sunol Dam. The DIER anticipates that 25.6 feet of Sunol Dam will be removed, to an elevation of 194.4 feet. The National Marine Fisheries Service (NMFS), in comments to the SFPUC, has proposed removing the dam to an elevation of 193.0 or even 192.0 feet. This would avoid any uncertainties as to the historic streambed elevation and would be low enough to prevent future re-exposure of the dam crest from scour. The concerns from NMFS about the final design and elevation of the dam crest are mentioned in Appendix B of the DEIR, in the response to comments on the Channel Geomorphology Study (page 47, paragraphs 2 and 3; response to comments, page 2, Item 4; minutes of the meeting about the Channel Geomorphology Study, page 5, 1st paragraph and 3rd paragraph).

Our second concern is that the Project avoids impacts to other sensitive species as much as possible, and adequately mitigate for unavoidable impacts.

We are particularly concerned about the potential loss of significant breeding habitat for the California red-legged frog due to lowering of groundwater after the Sunol Dam removal. The DEIR commits the SFPUC to monitoring the frog pond adjacent to the access road to Sunol Dam for 2 years after removal, to determine of any effects groundwater lowering. We would encourage the SFPUC to increase this monitoring to 5 years, to ensure this important breeding population does not become extirpated. We also request that the SFPUC institute a 5 year program to eliminate and control invasive fish and bullfrogs in this area, to benefit the red-legged frog population. We also encourage the SFPUC investigate alternatives to enhance or re-create suitable red-legged frog breeding habitat in the immediate area if significant groundwater lowering occurs that impacts the breeding population.

The Project anticipates potential removal of nests and relocation of dusky footed woodrats. There

is recent research showing that dusky footed woodrats and their nests can be successfully relocated. Rather than trapping and removing the woodrats, biologists have moved and rebuilt woodrat stick nests nearby, with woodrats successfully occupying their relocated nests. Please contact me for more information regarding this issue.

We understand the dam removal project will be on a tight schedule, with potential impacts to many species to consider in determining the timing and method of dam removal. We encourage the SFPUC to prioritize removal methods other than blasting, unless it is determined that blasting can be done without impact to nearby nesting blue herons and raptors.

The final issue is regarding the disposition of the sediment trapped behind the dams. The ACA supports leaving the sediment in the stream rather than removal, since removing the sediment would have additional environmental impacts. Information developed by the SFPUC indicates that the amount of sediment is not significant and much of it is coarse enough that it is not likely to move very far downstream. Some of this sediment may prove to be suitable spawning substrate for trout and other native fish. Without the dams, any fines in this sediment would have already moved downstream into the flood control channel anyhow. We encourage the SFPUC to find an amicable solution with the Alameda County Flood Control District (ACFCD) that leaves the sediment in place and allows it to move naturally downstream, while compensating the ACFCD for any sediment removal they may be required to do as a result of the Project, so that the Project can proceed.

We would like to request that the SFPUC report the documentation of sensitive species mentioned in the DEIR (particularly the documentation of California red-legged frog, western pond turtle, and Pacific lamprey at or near the two dam sites) to the California Department of Fish and Game's Natural Diversity Database.

Finally, we would like to request copies of some of the supporting documents for the DEIR, the SFPUC's Biological Assessment and the U.S. Fish and Wildlife Service and National Marine Fisheries Service Programmatic Biological Opinions for California red-legged frog, Alameda whipsnake, steelhead trout and any other listed species for the project.

Sincerely,

Jeff Miller

Director, Alameda Creek Alliance

## H. Response To: Jeff Miller, Alameda Creek Alliance, December 2, 2005

- H-1 As stated in the DEIR on page III-5, the final elevation of Sunol Dam would be approximately 194.4 feet<sup>4</sup>. As noted throughout the *final* (emphasis added) Weiss Associates report (October 2004) and on page III-5, the natural bed elevation at Sunol Dam is 194.4 feet, which is the elevation applied to the entire length of the Sunol Dam crest (Figure 7 in the DEIR). On December 5, 2005, Anna Roche, SFPUC, spoke with Gary Stern, National Marine Fisheries Service (NMFS) about the final elevation of Sunol Dam and he supported the final elevation of 194.4 feet (Roche, 2005a).
- H-2 Comment noted. Mitigation Measures D-1 D-10 (pages V-4 V-11) will ensure that the proposed project would avoid and/or minimize potential significant impacts on special status species. The SFPUC will also abide by any additional terms and conditions imposed by regulatory agencies, who will issue project permits.
- H-3 As noted in the DEIR on page V-7, Mitigation Measure D-4a (last bullet) includes a monitoring component for the California red-legged frog (CRLF) pond for a period of two years to determine the effects of groundwater lowering on the CRLF pond. This monitoring period is increased to five years. See response to comment D-3.
- H-4 The removal of the dams and a return to a more natural hydrologic flow regime through this area is not anticipated to provide improved habitat conditions for bullfrogs or non-native fish. It is anticipated that removal of the dams would decrease preferred habitat for these species by removing the pools behind each dam. Therefore, the DEIR did not include a mitigation measure addressing non-native fish and bullfrogs because no significant impact was identified requiring such mitigation. Nevertheless, the USFWS, as part of the formal consultation process regarding impacts to the CRLF, has requested bullfrog control measures be implemented during the CRLF surveys to be conducted as part of the five-year monitoring program. The DEIR is revised to add an improvement measure for the control of bullfrogs.

Following Mitigation Measure D-10 on pages I-20 and V-11, the following is added:

#### **Improvement Measures**

The following measure is recommended to control bullfrogs during the fiveyear monitoring period of the CRLF pond after dam removal:

Appropriate measures (e.g., the destruction of any bullfrogs, tadpoles or eggs) will be taken to control bullfrogs during survey work, population counts, and overall habitat monitoring, if feasible, where CRLF monitoring is required.

Final dam elevations (for both Sunol and Niles Dam) are  $\pm 3$  inches.

- H-5 Comment noted. As stated in the DEIR on pages IV.D-18, IV.D-19 and IV.D-29, CRLF surveys conducted by the SFPUC did not find CRLF in Alameda Creek. Preferred aquatic breeding habitat does not occur in Alameda Creek within the project area (refer to pages IV.D-18, IV.D-19 and IV.D-29). However, with the removal of Sunol and Niles Dams, potential aquatic breeding habitat for CRLF may be created. As stated in the DEIR on page V-8, if monitoring indicates groundwater lowering affects the CRLF, the SFPUC will consult with the USFWS to determine the need and location for additional mitigation, such as restoration or enhancement of CRLF habitat on SFPUC lands at a minimum of 1.1:1 ratio.
- H-6 The previous suggestions of the commenter were investigated but discussion with the California Department of Fish and Game (CDFG) led to the conclusion that the approach specified in the DEIR is appropriate (Roche, 2005b). Mitigation measure D-8 is a commonly accepted practice by the CDFG. Woodrats express nest fidelity; however, if a nest is destroyed, they are known to rebuild or to occupy another stick house. The DEIR is revised to clarify that if an active nest cannot be avoided, the nest will be destroyed after live-trapping of dusky-footed woodrats.

Mitigation measure D-8 on pages I-19 and V-10 is clarified as follows:

- D-8 Measure to protect San Francisco dusky-footed woodrat. A qualified biologist will conduct preconstruction surveys for woodrats before site clearing and grubbing activities. If active stick houses are observed, exclusionary fencing (i.e., silt fencing) will be installed around all project areas that are within 100 feet of active nests. If removal of inactive stick nests is required, a qualified biologist will monitor the removal. If a nest cannot be avoided, then live traps will be set at nest sites to trap and remove woodrats from the anticipated work area. The nest shall then be completely dismantled by the monitoring biologist so that it cannot be reoccupied.
- H-7 Comment noted. As noted in the DEIR on page IV.D-30, one of the proposed dam removal methods (blasting) has the potential to affect a great blue heron nesting site located approximately 800 feet upstream of Sunol Dam. Mitigation Measure D-7b (page V-10) was added to the project to avoid this impact. In addition, Mitigation Measure D-7a (page V-10) would avoid impacts to nesting and breeding raptors.
- H-8 Comment noted. Under the California Environmental Quality Act (CEQA), mitigation is required for significant adverse impacts. As stated on pages IV.F-29 IV.F-31 of the DEIR, sediments are expected to be transported downstream gradually and be deposited and stored throughout Niles Canyon. Given the expected gradual nature of the sediment movement and the relatively small percentage of impounded sediment volume compared to annual sediment load in the creek, the gradual deposition of sediment through this area would not increase impacts to a level of significance under CEQA; therefore, no mitigation is required. See also responses to comment letter D.

- H-9 The SFPUC submitted the results of the California red-legged frog survey to the CDFG's Natural Diversity Database as required by the USFWS protocol.
- H-10 The requested supporting documentation can be obtained from the San Francisco
  Department of City Planning, by contacting Diana Sokolove at (415) 558-5971. The
  SFPUC will forward the Biological Assessment to the commenter, and the balance of the
  requested documents are available from the USFWS and NMFS websites.

MEA: 30 VANNESS

----Original Message----

From: Steve Rusconi [mailto:rwgs263@yahoo.com]

Sent: Tuesday, December 06, 2005 10:04 PM.

To: blauppe@sfwater.org; plancryGM@ncry.org

Subject: Sunol-Niles Dam Project EIR Comments

The Pacific Locomotive Association, Inc. operators of the Niles Canyon Railway, would like to express our concern that the removal of the Sunol and Niles Dams on Alameda Creek and the proposed releases of water for the Calaveras Dam Project not damage the historic railroad right of way and bridge structures on which we transport passengers.

We note that the EIR for the Sunol & Niles Dam Removal Project is incomplete, as there is no consideration of the impacts of the project on all of the historic assets within the study area, specifically, the historic railroad right of way and structures. The SHPO has identified these historic railroad assets as qualifying for the National Register of Historic Places.

This railroad was constructed, beginning in 1865, as part of the First Transcontinental Railroad.

The Niles Dam (Vallejo Mill Dam) predates this railroad construction. All water flow affecting the

MEA: 30 VANNESS

railroad has been with the Niles dam in place.

We have concerns that removing the dams without mitigation to the railroad and its structures could cause erosion and undercutting of the historic bridge piers and adjacent embankment supporting the right of way.

Studied notations by the railroad's engineering department show that erosion to the right of way in the area of Milepost 31 over the last few years has exceeded all erosion there in the previous 135 years. This area is between the Farwell and Dresser bridges in the vicinity of the Niles Dam. The erosion coincides with larger than usual releases from upstream dams.

Prior to removal of the Sunol and Nilcs dams, we urge a thorough engineering analysis of the bridge piers at Farwell and Dresser and the embankment supporting the right of way between those bridges.

We also urge ongoing engineering monitoring of those structures and embankments after the dams are removed.

Furthermore, we request that consideration be given to mitigating the erosion in the area of Milepost 31 by retaining the material removed from the Niles Dam and placing it in the eroded area as a base for

12/14/2005 12:45 4155585991

MEA: 30 VANNESS

stabilizing the right of way.

Finally, we request that copies of the of the

historic, cultural and environmental documents for the

Sunol and Niles Dam Removal Project be provided for

the archives of the Pacific Locomotive Association,

Inc. and the Fremont Museum of Local History.

Thank you for your consideration of our requests.

Sincerely,

Steve Rusconi, PE

Maintenance of Way Department

Pacific Locomotive Association, Inc.

## I. Response To: Steve Rusconi, PE, Pacific Locomotive Association, Maintenance of Way Department, December 6, 2005

- I-1 As stated on page IV.G-5, Table 13, the Union Pacific Railroad and its proximity to the study area were acknowledged in the DEIR. Also on page IV.G-9, the railroad was discussed in relation to Joyland Park. However, the railroad right-of-way was not considered part of the area of potential effect because it is far enough away from the dam removal process that it will not be affected. The dam removal is limited to the width of the creek itself. The potential impacts posed to the railroad by the Cavaleras Dam Project would be addressed in the environmental documents associated with that project, if warranted.
- I-2 See response to I-1. Archaeological surveys conducted at Joyland Park did not reveal any surface deposits associated with the use of Joyland Park and its association with the railroad. However, Mitigation Measure G-2a on page V-16 in the DEIR is provided to reduce the possibility of unknown cultural resources being affected during construction.
- I-3 As stated in the DEIR on page IV.F-1: "Both Sunol Dam and Niles Dam are flow-over structures that do not affect the flow regime of the creek or control downstream flooding. The creek flows over the top of the dams during all months of the year, and the structures serve only to control grade. Both dams are nonoperating structures in that they lack control mechanisms, and reservoir levels are not artificially fluctuated to manage high flows in the creek."

Farwell Bridge is estimated to be approximately 1,350 feet upstream of Niles Dam. Dresser Bridge is estimated to be approximately 2,900 feet downstream of Niles Dam. As stated on page IV.F-2, the conservative estimate for extent of backwater effects for Niles Dam is 600 feet upstream of the structure. During high flows this effect may extend upstream, however even with several feet of water above the normal spillway elevation of the dam, backwater effects do not extend back to the Farwell Bridge crossing. Based on the extent of backwater effect at Niles Dam and the relative proximity of the railway structures, the impacts to creek flowrate and velocity by removal of the dams at the bridge pier locations is expected to be negligible. Therefore, no mitigation to address downstream flooding and erosion at the railroad bridge structures or embankments is necessary.

- I-4 See response to I-1 and I-3. Because hydrologic impact analysis determined that the bridge piers at Farwell and Dresser and the embankment would not be affected by the project, an engineering analysis of downstream structures before dam removal is not warranted.
- I-5 See response to I-4.

- 1-6 The DEIR did not identify any impacts; therefore, mitigation is not required.
- I-7 A copy of the Responses to Comments document will be sent to the Pacific Locomotive Association, Inc. The requested supporting documentation can be obtained from the San Francisco Department of City Planning by contacting Diana Sokolove at (415) 558-5971.



City & County of S.F. Dept. of City Planing

DEC 0.7 2005

OFFICE OF ENVIRONMENTAL REVIEW

To: Environmental Review Officer San Francisco Public Utility Commission 30 Van Ness, Suite 4150 San Francisco, Ca 94102

From: Laurel Collins Director Watershed Sciences 1128 Fresno Ave Berkeley, CA 94707 (510) 524-8204 collins@lmi.net

December 5, 2005

To SFPUC Environmental Review Officer,

Thank you for the opportunity to comment on the SFPUC's EIR for the Sunol/Niles Dam Removal Project. I have listed a few comments concerning potential impacts from sediment that would be released from the Sunol/Niles Dams. Perhaps my most important point is that monitoring should occur downstream of the dam sites to assess whether sediment removal or mitigation may be necessary due to loss of channel capacity or damages to riparian or aquatic habitat. Coupled with short-term prudent mitigation, I sincerely look forward to the long-term benefits that will be gained by the removal of these dams.

Best Regards

Laurel Collins, Director Watershed Sciences

Cc: Laura Kidd, Alameda County Ralph Johnson, Alameda County

#### **LIST OF COMMENTS 1-12**

1. Page 1-17, 5<sup>th</sup> bullet:

"Channel banks will be returned to original grade slope". Existing bank slopes range from gentle to vertical. If the banks are returned to pre-existing conditions, particularly vertical banks, they could be unstable as they adjust to a more incised channel that has cut into the impounded deposits. Why not just grade bank slopes to a stable condition as necessary?

2. Page 1-19, D-9a:

"All nparian woodland areas disturbed or removed during dam removal activities will be restored to pre project conditions." It is not possible to restore to preproject conditions because the age structure of the woodland cannot be duplicated. Is this statement intended to mean that vegetation species will be replaced with the same number and kind of species?

- 3. Page I-32 to 33, Table 1, Comparative Study of Environmental Impacts: Why aren't impacts of increased sediment supply to aquatic habitats directly downstream of Sunol and Niles dams listed? Impacts might include pool filling with sediment, deposition of gravels and sediment on previously vegetated bars or floodplains, resulting in the death of riparian vegetation, and potential for increased localized flood impacts in Niles Canyon due to temporary, even though potentially short-term, loss of channel capacity from sedimentation before it has significantly dispersed.
- 4. Page II-6, bullets regarding other migrational barriers:
  Why not include in the list that there are plans to remove or modify some of these barriers?
- 5. Page IV.A-9, 5th paragraph:

"The gradual release of sediment from the project area following dam removal would not conflict . . . . release of sediment would occur gradually over a period of decades and would not significantly affect the sediment load of Alameda Creek." There is no assurance that the sediment release will be gradual. It will be highly dependent upon flow conditions following removal of the dam.

6. Page IV.D-28, 2nd to last paragraph:

"Mitigation Measure D-3 would reduce these impacts [short term sedimentation and turbidity of Alameda Creek during and after dam removal, temporary alteration of stream habitat . . .]" Following dam removal, no measures are listed to monitor, assess, or ameliorate impacts from sedimentation in the channel downstream of the dams or upstream of the backwater influence.

7. Page IV.E-8, third paragraph:

"The maximum seismic event that could affect the project area would be an earthquake with a moment magnitude of 6.8 on the Calaveras Fault." Why wouldn't the maximum magnitude event be from a 7.1 or larger from the Hayward Fault?

8. Page IV.E-10, 2<sup>nd</sup> paragraph:

"Over the long term (defined for this purpose as 100 years or more), these sediments would eventually reach the Alameda County Flood Control Channel; however, historical records of sediment removal in the channel indicate that the majority of sediment load carried by Alameda Creek passes through the channel (Weiss Assoc 2004). This statement is incorrect. Most of the sediment that is

transported to the Flood Control Channel where it is deposited not transported through to the bay. Based upon County cross section surveys and records of sediment dredging, at least 60% of the sediment transported at Niles gage is deposited in the Flood Control Channel.

"In addition, the volume of sediment behind each dam is relatively small compared to the total volume of sediment currently transported by the creek, which has been estimated at 160,000 cy annually. Therefore the potential impact is less than significant." Between 1965 and 1999, Weiss associated calculated that 7,600,000 tons (4,5000,000 cy) of sediment was transported by Alameda Creek past Niles gage. The total annual volume over a 34-year period is stated to be 269,000 tons/yr (about 160,000 cy/yr). The conversion to volume is stated to be one cubic yard equals 1.7 tons. If we calculate the same load starting with 7,600,000 tons, and using the same conversion, we come up 223,500 tons/yr (131,500 cy/yr) not 269,000 tons/yr (160,000 cy/yr). Perhaps there is an error? If we include the amount of sediment that has been transported through the gage between 2000 and 2004, as reported by the USGS, then the additional amount equals 612,285 tons (360,168 cy). Over the new total 39-year period, this would equal 8,212,285 tons (4,830,756 cy) or 210,571 tons/yr (123,866 cy/yr) of sediment transported past the Niles gage. This value is about 8% less than the reported value.

A total of 39,200 cy of sediment is reported to be stored behind both dams (page IV.E-10, first paragraph), 37,000 cy from the Sunol Dam. This represents 32% of the total annual load if we use the sediment data that includes 39 year of data, versus 25% if we use the reported SFPUC value of 160,000 cy. Does this still make the impact less than significant? At what percentage does the impact become significant, especially if the amount is underestimated?

If we consider the calculated 37,000 cy of sediment stored behind Sunol Dam, to be a potential minimum estimate and therefore, the possible impacts of increased downstream sediment supply could not be adequately evaluated. This could be potentially mitigated by monitoring of upstream and downstream impacts so that sediment removal or remediation could be undertaken if necessary.

I have seven reasons why 37,000 cy might be an underestimation of impounded sediments. One, estimates of sediment supplied from future bank erosion upstream of the dam were not considered in the calculation. Two, sediment in the form of depositional bars in the channel bed upstream of the dam that are above the height of the spillway elevation along the 2400 ft length of the longitudinal profile were not considered in the calculation. Three, sediment in bar/delta deposits upstream of the dam backwater, especially deposits from large floods that have water elevations significantly higher than the spillway elevation, were not considered in the calculation. Four, the sediment supply volume is only for sediment impounded upstream of the dam and not for increased supply downstream from bank erosion that could occur as a result of bed aggradaation. Five, the combined erosion of dam deposits and channel banks will increase the proportion of sand delivered to Niles Canyon. Increasing the proportion of sand in

the bed will increase bed mobility and sediment transport in the downstream channel. This is well documented in the geomorphic literature. Six, on page IV.E-10 (third and fourth paragraphs), it is stated that the head cutting of impounded sediments upstream of the dam could cause increased transport of sediment downstream and alter the natural downstream geomorphology of the creek bed, and flatten out the gradient of the creek bed upstream and potentially alter its geomorphology. Seven, SFPUC states on page 4 in Response to Comments in the EIR, that "Each study concluded with varying amounts of sediment stored behind Sunol Dam with this study being bracketed by the other two studies. There is an uncertainty associated with the estimates . . . " This suggests that the EIR should provide an estimate of error in potential sediment supply to effectively evaluate potential impacts.

#### 9. IV.F-2, footnote #3:

"Entrenchment is the degree to which the channel is contained in its valley and is typically measured as the ratio of the width of the floodplain to the width of the bankfull channel." Entrenchment is the ratio of bankfull width to floodprone width, which is measured at a height equal to twice the maximum bankfull depth.

10. Page IV.F-10, 4th paragraph:

"... ACFCWCD removed 863,000 cy of sediment from its flood control channel between 1975 and 1999, and the total sediment load of Alameda Creek from the time of construction of the flood control channel in 1965 through 1999 was 4,500,000 cy. Over the long term, therefore, ACFCWCD has removed 19 percent of the sediment load carried by Alameda Creek." The report fails to mention that the total amount of sediment that has been dredged from the flood control channel represents only a small proportion of the total sediment that has been deposited, all of which function to diminish flood capacity of the control structure.

Using USGS sediment gaging records through 2004 in conjunction with the sediment rating analysis conducted by Weiss Assoc (2004), and using both the Alameda County dredging records through 2001 and their 2004 cross section surveys in the flood control channel, it has been possible to calculate that 60% of the total sediment transported past Niles gage has been deposited in the flood control channel since its construction. The amount dredged now represents only 12% of the total load (rather than 19%). The estimated annual rate of sedimentation of about 75,900 cy/yr will continue to diminish flood control channel capacity and challenge managers to maintain design capacity. The addition of impounded sediment in the Niles Canyon because of the dam removal project will certainly increase the average annual sedimentation rate of the food control channel for an unknown period. When the amount of 39,200 cy is compared to the annual supply, it is important to consider that the annual supply is dispersed over time form the entire watershed. Most sediment sources to Alameda Creek are upstream of Niles Canyon, landslides for example. The channel in Niles Canyon has functionally served as a sediment conveyor rather than a source. Release of this large localized quantity of sediment in the canyon changes this paradigm.

11. Page ix of Final Report Channel geomorphology Study Weiss Assoc 2004, last paragraph:

"Presumably the other 81% of the natural sediment load either deposits in sections of the flood control channel where it does not present a maintenance concern, and/or the sediment is eventually transported through the flood control channel to the bay." This comment remains unchanged even though changes were agreed upon during the September 2004 meeting regarding agency concerns. According to the Minutes of the meeting, which are included in the EIR, page 3, the tone of the discussion was requested to be adjusted by the ADFCWCD. I recall that it was to be deleted. Neither has occurred.

12. Page 6, of Final Report Channel geomorphology Study Weiss Assoc 2004, Action Item 2:

An updated Figure 11 was to be included within the report. No changes appear to have been made on either Figure 11 in the Weiss Report or Figure 14 of the EIR.

## J. Response To: Laurel Collins, Watershed Sciences, December 5, 2005

- J-1 See response to comment H-8.
- J-2 The standard permit requirements from the California Department of Fish and Game, the U.S. Army Corps of Engineers, and the San Francisco Regional Water Quality Control Board are to remove all fill from creeks and to restore banks to original grade slope. Returning bank slopes to pre-project conditions would allow Alameda Creek to geomorphically adjust itself over time.
- J-3 The commenter's interpretation of the statement on page I-19 in the DEIR, Mitigation Measure 9a is correct. As noted on page I-19, the SFPUC will replace trees removed or destroyed at a minimum 1.1:1 or other appropriate ratio, as agreed on by the regulatory agencies. An increase in the number of trees replaced versus trees removed is to compensate for the difference in age structure. Restoration of the project sites will include replacement of the same species composition and habitat type as existed before the dams are removed. In addition, replacement vegetation will be native species.
- J-4 As shown in Table 10 (page IV.F-10 in the DEIR), the estimated existing annual average sediment load is 269,000 tons per year in Alameda Creek. A sediment pulse equivalent in size to that stored behind the dams (65,900 tons) is likely to be within the normal range of variability of sediments supplied to the channel on an annual basis. As noted on page IV.F-30, when the sediment volume behind a dam is small relative to the annual sediment transport capacity, the impact on the downstream channel when sediment is released from behind the dam would likely be insignificant. For this reason, downstream impacts to aquatic habitats from sediment transport were not included in Table 1. Furthermore, the erosion of the sediments stored behind the dams is expected to be similar to other naturally occurring events within the system, such as sediment introduced into the creek by landslides, slumps, or overland flow during major rainfall events (page IV.F-30). However, some aggradation could occur, mostly enlarging existing sediment storage features in Niles Canyon. Aggradation effects are not expected to be severe or to result in a permanent channel change, with sediment dispersion downstream occurring over about a decade (page IV.F-31).
- J-5 Following the four bullets on page II-6, a new paragraph is added to the DEIR noting that there are plans to remove or modify some of the barriers.

Following the fourth bullet on page II-6, the following paragraph is added:

Studies have been undertaken or are underway examining the feasibility to modify or remove some or all of the barriers. For example, CH2MHILL prepared a technical memorandum on the *Conceptual Fish Passage Designs & Cost Estimates for Lower Alameda Creek* (CH2MHILL, 2001). That memorandum proposed fish passage features, such as fishways for upstream

migrating adults, and fish screens to protect outmigrating juvenile fish, and minor channel improvements at each fishway. The Center for Ecosystem Management and Restoration, FarWest Restoration Engineering, and WRECO prepared a report titled Conceptual Design and Feasibility of a Natural Fishway at the Fremont BART Weir, Alameda Creek, California (2005) that examines the feasibility of an alternative to the proposed CH2MHILL fishway at the BART weir.

The following references are added to page II-9:

- Center for Ecosystem Management and Restoration, FarWest Restoration

  Engineering, and WRECO, Conceptual Design and Feasibility of a

  Natural Fishway at the Fremont BART Weir, Alameda Creek,
  California, 2005.
- CH2MHILL, Conceptual Fish Passage Designs Cost Estimates for Lower

  Alameda Creek. Available on-line at

  http://www.alamedacreek.org/Fish\_Passage/Flood%20Control%20C

  hannel/Flood%20Control%20Channel.htm, accessed January 9,

  2006.
- J-6 The DEIR is clarified.

The third paragraph under 'Project Consistency with Policies' on page IV.A-9 is revised as follows:

The gradual release transport of sediment from the project area following dam removal would not conflict with the Alameda County Public Works Agency's Watercourse Protection Ordinance. As discussed in Chapter III, Project Description, and Section IV.F, Hydrology, Groundwater, and Water Quality, the release of sediment would occur gradually redistribute in a dispersional manner throughout Niles Canyon and be stored in the creek bed, banks, bars, and levees over a period of decades and would not significantly affect the sediment load of Alameda Creek.

See also response to comment D2-b.

- J-7 See response to comment J-1.
- J-8 As stated in the DEIR on page IV.E-8, the Sunol Dam, the larger of the two structures, is located closer to the Calaveras fault than the Hayward fault. The Hayward fault is certainly capable of causing damage but the Calaveras fault would generate the highest ground motion at the project site based on modeled earthquake scenarios. The estimates of ground motion are determined through models that account for several factors such as distance to the causative fault, historical fault activity, underlying geology, and slip rate.
- J-9 As stated on page IV.F-30 in the DEIR, almost all sediment would eventually reach the flood control channel over a period of one to a few decades. Some sediment would deposit in the flood control channel and some would pass through to San Francisco Bay. The DEIR is clarified.

The second paragraph on page IV.E-10 is revised as follows:

Five distinct storage features found on the creek are capable of increasing their storage capacity to absorb this increased load without substantially changing the geomorphology of the creek. These storage features—the creek banks, levees, sandbars, floodplains, and creekbed—would regulate the flow of sediment transport downstream. Over the long term (defined for this purpose as 100 years or more), these sediments would eventually reach the Alameda County Flood Control Channel; however, a portion of which would potentially be deposited in locations that may require excavation. The exact fate of sediments once they reach the flood control channel is not easily predicted. hHistorical records of sediment removal in the channel indicate that a majority of the sediment load carried by Alameda Creek passes through the channel only 19 percent of the total volume of Alameda Creek sediment is removed for maintenance of the channel. The current ACFCWCD maintenance program removes approximately 300,000 cy of sediment every 10 years (Weiss Associates, 2004).

J-10 The commenter's calculations are correct. The noted change in sediment transported past the Niles gauge does not alter the conclusion or recommendations provided within the Weiss Associates report or in the DEIR. The DEIR is revised with the corrected numbers.

The third paragraph on page IV.F-7 is revised as follows:

The combination of suspended load and bedload establishes the total sediment load for the creek. The total average load is 269,000 223,500 tons per year, total median load is 72,000 tons per year, and the watershed yield is 425 tons per square mile per year.

Table 10 on page IV.F-10 is revised as follows:

### TABLE 10 SUMMARY OF ANNUAL SEDIMENT LOAD IN ALAMEDA CREEK AND ESTIMATED SEDIMENT IMPOUNDMENT AT SUNOL AND NILES DAMS

### Annual Sediment Load in Alameda Creek

Total average load

269,000 223,500 tons per year

Total median load 72,000 tons per year

Estimate Sediment Volume Behind Each Dam

Sunol Dam Niles Dam Total Impounded 62,000 tons 3,700 tons 65,900 tons

The paragraph following Table 10 on page IV.F-10 is revised as follows:

A comparison of the average annual sediment load of Alameda Creek and the conservative (high) estimate of total impounded sediments indicates that impounded sediments are approximately 25 29 percent of the average annual sediment load.

The third paragraph on page IV.F-30 is revised as follows:

Table 10 presents a comparison of these quantities. As shown in the table, the total estimated volume of impounded sediment (65,900 tons) is 2529 percent of the estimated annual average sediment load (269,000 223,500 tons per year) in Alameda Creek. A sediment pulse equivalent in size to that stored behind the dams is likely to be within the normal range of variability of sediments supplied to the channel on an annual basis (e.g., a sediment pulse introduced by landslides) (Weiss Associates, 2004).

- J-11 The sediment values noted within this comment, considering the variability within all of the analyzed data within the Weiss Associates report, does not alter the conclusions or recommendations. The determination of significance arose from three main points of evidence (see page ix of the Weiss Associates study):
  - The amount of sediment stored behind the dams is relatively small compared to the sediment load transported by Alameda Creek (also see page IV.F-30 in the DEIR);
  - There are natural sediment storage features that will moderate the pulse of sediment as it travels downstream (also see page IV.F-31); and,
  - The sediment pulse will move gradually in a dispersional, rather than a translational mode, reducing the likelihood of significant aggradation in any one river reach (also see pages IV.F-30 IV.F-31 in the DEIR). See also responses to J-4 and J-13.

The 160,000cy/yr is noted on pages viii and 43 of the Weiss Associates study and on page IV.E-10 in the DEIR. See also response to comment J-10.

- J-12 The estimate of 37,000 cy was arrived at by Weiss Associates and is, in part, the result of a field survey and the results from two previous studies of this same issue. The first two studies established a range of estimates from 42,000 cy (Trihey & Associates, 2000 as reported in Weiss Associates, 2004 page 14) and 9,000 cy (Geomatrix, 2004 as reported in Weiss Associates, 2004 page 15) using similar methodology. See response to J-1 and J-13.
- J-13 The volume of sediment estimated by the three separate studies is estimated to be within the natural variability of sediment transported by the creek and is, therefore, not deemed to substantially or significantly affect any of the significance criteria as listed on page IV.F-26 in the DEIR. Furthermore, the less-than-significant impact is based on the nature of the sediment movement gradual over the course of decades down the creek, not in one translational slug (see pages IV.F-30 IV.F-31). Local readjustment of banks, bars, and levees within the creek and floodplain is a natural phenomenon experienced during high flows and this material is within the range of natural variability and is less than the average annual load carried by the creek (see pages IV.F-30 IV.F-31).

The Weiss Associates study states on page viii, "Regardless of these uncertainties [in stored sediment volume at Sunol Dam], the amount of sediment stored at the Sunol dam site does not alter conclusions regarding relative capacity of Alameda Creek to transport

the sediment load stored at the dams ..." Page IV.F-7 of the DEIR is revised to clarify the discussion of sediment stored behind the dams.

The fourth paragraph on page IV.F-7 is revised as follows:

Assuming an original bed elevation at the dam of 194.4 feet (NGVD 29 datum)<sup>1</sup> and an upstream bed slope of 0.0044 ft/ft (see Figure 14), the estimated volume of sediment stored behind Sunol Dam is 37,000 cubic yards (cy), or 62,200 tons<sup>2</sup> (Weiss Associates, 2004). This amount is about 2.5 times higher than the Conceptual Engineering Report (CER) estimate of 15,000 cy (CER, 2004). The Trihey & Associates report estimated 42,150 cy (2000). Assuming an original bed elevation at the dam of 108.4 feet (NGVD 29 datum) and an upstream bed slope of 0.008 ft/ft (see Figure 15), the estimated sediment volume stored behind Niles Dam is 2,200 cy, or 3,700 tons (Weiss Associates, 2004). The CER estimated between 700 cy to 2,800 cy (CER, 2004), while the Trihey reports estimated 2,200 cy (Trihey & Associates, 2000). Using the more recent Weiss Associates totals, Thus, the total sediment volume stored behind both Sunol and Niles Dams is estimated at 39,200 cy (65,900 tons).

J-14 The commenter is correct. Footnote #3 is modified to clarify the definition of 'entrenchment.'

Footnote #3 on page IV.F-2 is clarified as follows:

Entrenchment describes the relationship of the stream to its landscape. Entrenchment is the degree to which the channel is contained in its a stream is cut into the valley floor and, is typically measured as the ratio of calculated as a ratio of the width of the floodplainprone area (i.e., area covered at flood stage of twice the maximum bankfull depth) to the stream's width of the bankfull width ehannel.

J-15 The DEIR is modified to provide clarification that the total amount of dredged sediment represents a portion of the total sediment within the flood control channel. However, this change does not alter the conclusion.

The third full paragraph on page IV.F-10 is revised as follows:

According to Weiss Associates (2004), ACFCWCD removed 863,000 cy of sediment from its flood control channel between 1975 and 1999, and the total sediment load of Alameda Creek from the time of construction of the flood control channel in 1965 through 1999 was 4,500,000 cubic yards. Over the long term, therefore, ACFCWCD has removed 19 percent of the sediment load carried by Alameda Creek. The exact fate of sediments once they reach the ACFCWCD flood control channel is not easily predicted. A model for sediment transport through the flood control channel does not currently exist. What is known is that sections of the flood control channel are subject to sediment deposition, requiring excavation to

NGVD is the National Geodetic Vertical Datum established in 1929.

Mass of sediment was estimated based on 1.7 tons per cubic yard of sediment.

maintain flood capacity. For example, there were eight desiltation projects between 1975 and 1999 over a distance of eight miles out of a total 11.1 miles of flood control channel (desiltation activities were not carried out over the entire eight-mile length, as the desilted reaches were discontinuous in length). Some of this total length includes overlapping channel reaches that have been desilted more than once (Weiss Associates, 2004).

- J-16 Comment noted. The Weiss Associates study is a final background report to the DEIR. As such it can not be modified.
- J-17 A revised Figure 11 was included in the Weiss Associates final report. The current Figure 11 includes additional data that spans a little farther upstream to encompass all available data. Figure 14 in the DEIR is from the Weiss Associates final report.



"Carlyle Holmes" <carlyle@syrcl.org> 10/27/2005 12:05 PM To <diana.sokolove@sfgov.org>

CC

bcc.

Subject Public Comment on the SFPUC Calaveras Dam Replacement Project

Paul Maltzer Environmental Review Officer Calaveras EIR 30 Van Ness Avenue Suite 4150 San Francisco, CA 94103

Dear Mr Maltzer,

As a supporter of the Alameda Creek Alliance, I am writing to express my support for your proposal to remove Niles and Sunol Dams from Niles Canyon. These removals, in concert with other fish passage projects in the lower creek already funded or in the planning stages, will help steelhead trout and salmon migration up Alameda Creek to Sunol Wilderness.

However, I would like to express my concern about the SFPUC Calaveras Dam Replacement Project. This dam replacement project represents a unique opportunity to take steps to restore our salmonid resources. However, this project does not take advantage of this opportunity--treating the project as an engineering project with no restoration component.

This proposal needs to be rewritten to include restoration actions such as ensuring adequate flows downstream of the dam for migratory fish (not just resident trout), the re-operation or removal of the Alameda Diversion Dam, surveys for endangered and threatened species around the construction sites, and provisions for keeping construction roads and dirt fill areas away from important habitat areas. The project should also include facilities and hardware that allows for stream restoration downstream, including release of the full range of needed stream flows and downstream transport of spawning gravels; adequate fish screens should also be installed at water intakes to protect reservoir fish.

Please help us take advantage of this opportunity to ensure restoration of our anadromous fisheries—they are a resource for our entire state. Thank you.

Sincerley, Carlyle Holmes

Carlyle Holmes 15454 Wet Hill Rd. Nevada City, CA 95959

.

## K. Response To: Carlyle Holmes, October 27, 2005

- K-1 Comment noted.
- K-2 This comment is not related to the proposed project or the Sunol/Niles Dam Removal Project DEIR. The comments in this letter were referred to Diana Sokolove, who is the San Francisco Planning Department's EIR Coordinator for the Calaveras Dam Replacement Project EIR. Contact Diana Sokolove at (415) 558-5971 for further information and/or assistance.



"SB2649" <SB2649@comcast.net> 11/08/2005 07:07 PM

<Dlana.sokolove@sfgov.org>

MEA: 30 VANNESS

CC

bcc

Subject DEIR for Sunol Dam removal

Es This measage has been forwarded.

Dlana.

I have already written to you about the Sunol Dam removal regarding the sedge patch next to the dam. Although I am not Native American, I have an interest in Native American basketry and other aspects of the culture. Coyote East Bay Regional Park has a program which is attempting to reintroduce Ohlone descendents to some Ohlone culture for which I am a volunteer. Part of the program is to reintroduce Ohlone style basketry both to Ohlone descendents and anyone else interested in learning the art form, One of the main weaving materials besides willow for Ohlone basketry is the rhizomes of sedge. Unfortunately, with urbanization and the channeling of most waterways in the area, sedge is now very difficult to find in any significant quantity. On a creek clean up some years back, much to my surprise i came across this large patch of sedge. Since that time, this patch of sedge has been the major source of this weaving material for the program thanks to the permission of the water district. I am also on the Alameda Creek Alliance Board so I know that the removal of the dam is of the utmost importance to restart the steelhead and salmon runs to the creek and it certainly must be the priority. While I know that along with the dam, some of the sedge patch will have to be destroyed. It is my hope however that as much of the sedge patch as possible can be saved or at least reestablished after the removal of the dam. It would also be nice to know how much of the patch will be destroyed so that we could go in before the removal of the dam to obtain some of the rhizomes for future basketry programs.

For any further questions or concerns, you may contact me at: Scott Taylor 2649 Barrington Terrace Fremont, CA 94536 510-792-4199 Sb2649@comcast.net

Thank you. Scott Taylor

## L. Response To: Scott Taylor, November 8, 2005

L-1 Mitigation measures for impacts to wetlands, riparian woodlands and other types of habitat located along Alameda Creek are included in the DEIR (see Mitigation Measures D-2d on page V-4, D-2e on page V-5, D-9a, and D-9b on page V-11). On December 19, 2005, Barbara Palacios of the SFPUC met with Beverly Ortiz, who leads the sedge rhizome collecting outings, and ESA biologist Chris Rogers to discuss the potential for disturbance to the sedge bed during dam removal activities. According to Ms. Ortiz, the principal ways in which the sedges are harmed, other than removal of plants, is by soil compaction and tire ruts, both of which reduce the capacity of sedges to produce long, straight rhizomes that are sought for basketry. The following improvement measure is recommended to further reduce the less-than-significant impact to this wetland species.

Following Mitigation Measure D-10 on pages I-20 and V-11, the following is added:

#### **Improvement Measures**

The following measures are recommended to further reduce the less-than-significant impact to the wetlands containing the sedge bed upstream of Sunol Dam in the event that access across Alameda Creek is required to cross the sedge bed.

- A biologist will coordinate with the Contractor to identify a temporary access route to the creek that is least damaging to the sedge bed, as well as to the associated willow riparian woodland. During the December meeting, it appeared the best route is the same as what was used by vehicles during the geotechnical investigation of the streambed, as this route will require the least amount of tree trimming and will prevent additional damage to the sedge bed. Any tree trimming will be supervised by the SFPUC or its designated biological resources monitor assigned to the project.
- The temporary access route will be fenced with construction fencing, flagged, and signed to clearly establish that vehicles, equipment, or footpaths will not be placed outside of the designated access route without prior consent of the SFPUC or the biological resources monitor.
- To the extent practical, only low-impacting or lightweight equipment will cross the sedge bed, such as vehicles fitted with balloon tires or tracks.
- Mats will be placed on the sedge bed area to form a temporary road to
   distribute the weight of the equipment and minimize soil compaction
   and rutting. The type of mat used will depend on the size of the
   equipment that needs to access the stream, the duration that the mat
   needs to be in place, and the time of year. Examples of materials that

have demonstrated applicability in similar conditions include: geotextiles (permeable fabrics used for stabilizing the native soil underlying a temporary road and separating the soil from roadbed materials); timber mats (platforms made of several dimensioned timbers fastened into a platform); log corduroys (logs placed alongside each other to form a road); Land Bridge Mats<sup>TM</sup> made from recycled truck tires (for short durations only); expanded metal grating; bridge decks; and sectional high-density polyethylene mats.

- If a temporary access road is required to remain in place and be used for several months or longer, then an engineered solution may be required. This may consist of a combination of geotextiles, drainage rock or wood chunks, and lightweight roadbed. Materials with known potential to leach toxic substances, such as construction debris, treated wood, tires, asphalt, or other petroleum-laden materials are not suitable for use.
- If possible, the timing of temporary access route construction and use should be coordinated to avoid the May period of sedge rhizome harvesting. The preferred timing would be for summer use only to minimize the time during which the road is in place during periods of high soil moisture, when it is most susceptible to compaction, and to allow for repair of compacted areas following removal of the road.
- If the temporary access road will remain in place longer than one month, sedges will be salvaged and cultivated by a qualified nursery for eventual use in revegetation of the access route. Salvaging will be supervised by a qualified cultural resources or biological resources monitor.
- As soon as the temporary access road is no longer needed, it will be removed from the sedge bed, and all materials used will be taken away from the project site. Removal will take place from within the designated temporary access route. Areas of compacted soil will be decompacted using hand tools, and the area returned to near original contours. Addition of fill soil to level the ground surface must be approved by a qualified cultural resources or biological resources monitor. The affected area will be revegetated with sedge plants salvaged prior to construction, if the temporary access road remains in place longer than one month.
- Re-establishment of sedges on the temporary access route will be monitored for one year. At the end of this period, recommendations for further action, if necessary will be transmitted to the SFPUC.

1	
2	
3	
4	SAN FRANCISCO PUBLIC UTILITIES
5	SUNOL & NILES DAM REMOVAL PROJECT
6	PUBLIC SCOPING MEETING
7	FREMONT MAIN PUBLIC LIBRARY
8	2400 STEVENSON BOULEVARD
9	FREMONT, CALIFORNIA
10	
11	
12	
13	WEDNESDAY, NOVEMBER 30, 2005
14	6:30 O'CLOCK P.M.
15	
16	
17	
18	REPORTED BY: DEBORAH FUQUA, CSR#12948
19	
20	
21	
22	
23	
24	
25	

APPEARANCES
San Francisco Public Utilities Commission
PAUL MALTZER
DIANA SOKOLOVE
BETSY LAUPPE-RHODES
ANNA ROCHE
BARBARA PALACIOS
Environmental Science Associates
VICK GERMANY
LEE MILES
F
PUBLIC SPEAKERS
Jeff Miller
Beverly Ortiz
Scott Taylor

Wednesday, November 30, 2005

6:33 o'clock p.m.

---000---

PAUL MALTZER: Okay. I think we're ready to get started.

Good evening, everybody. My name is Paul
Maltzer. I'm the environmental review officer with the
Planning Department in San Francisco. Just by way of
some introductions, also with me here tonight is Diana
Sokolove from the Planning Department, who is the
project coordinator for EIR. We also have Anna Roche
from the PUC and some of our consultant team here as
well.

We're holding this hearing tonight mostly to hear from you, although I just have some -- a few introductory comments. If you're here, you probably know that our office has just recently published this Draft EIR for the Sunol/Niles Dam removal project.

We're here to seek public comment on that Draft EIR.

Our Planning Commission is going to be holding a similar hearing tomorrow afternoon. Because this project is located in Alameda County, we thought that we should have a hearing here as well to save people the trip to San Francisco. Again, there is this other hearing, but if you're here tonight, there's really no need to go to this other hearing. The hearings are

duplicative. They're both to receive public comment on the same EIR.

Just a little background information for people who may need it -- this may be information that you don't need -- EIR's are informational documents for decision makers and for the public. They're supposed to present information about a proposed project and its potential physical environmental impacts, information that's intended to be disseminated by the public, used by the decision makers prior to decisions on a project.

Typically, they'll contain information about potential physical environmental impacts, mitigation measures, ways to reduce or avoid those impacts, and alternatives to what's being proposed if there are some potential significant effects. The EIR now is in draft form. It will need to be made final before any final decisions can be made on the project.

And again, the EIR essentially is made up of two key pieces -- the Draft EIR, we have a copy of it there on the table; you've probably already seen that if you're here. There's a Draft EIR followed by a second book, if you will, of comments and responses. In between the two is where we are at now.

After the draft is published, it has our initial take, if you will, on what the potential

impacts are of the project. And it's then sent out to the public. We receive comments on the adequacy, accuracy of information in that book, see if we need to make any final changes to it or respond to comments before the book is made final.

. 13

So after this Draft EIR, after the public comment period, there will be this second book of comments and responses which will need to get completed and distributed before the EIR will be ready to be brought to our Planning Commission to certify that it's final.

In addition to oral comments there's a written comment period. And I have to say, Diana, when is the --

DIANA SOKOLOVE: 7th of December.

PAUL MALTZER: The 7th of December. There is a written comment period that extends for another week, about, for people who either want to supplement their comments or who don't make oral comments; they can send written comments to me or Diana by December 7th.

A few additional points, just again to point out to people, this is comments about an informational document. This is not a project approval hearing. So to the extent you may like the project, dislike the project, think it should be approved or not approved,

we can hear those comments. But that's -- you know, at most the EIR will just note that that is your opinion about whether the project should be approved. Ideally your comments should be directed to the adequacy and accuracy of the information: Is it objective? Is it complete? Does it give a good understanding of the potential environmental impacts and ways to mitigate or avoid or reduce impacts?

25.

Also, just so you understand, we're not here to answer your comments orally tonight. We have a court reporter here. We're going to create a transcript. We're going to have all the comments in writing, and then there will be the subsequent book -- a book of comments and responses to all those comments -- that we produce. So we're just going to take your comments tonight and then respond to them in writing.

And again, when we're done with that comments and responses, we'll have a hearing before our Planning Commission to certify that the EIR is complete.

We do have a court reporter, so I ask that you speak clearly and slowly so that we can get your comments in full. We also ask that you state and spell your name so we can get that accurate. And if you want to receive a copy of the comments and responses, we

will routinely send that book to all commenters, but in order to do that, we obviously need to have an address, a mailing address. So be sure, either in writing or orally, to make sure that we have your address if you want to receive the comments and responses.

I'm going to read through the speaker cards.

I only have two. Does anyone else intend to speak?

Looks like we have three. I wasn't sure how long -- I was going to give people three minutes to speak. We obviously -- I don't know that we need to stick to that. I could give you all about probably and hour to speak. But I'd like to see if maybe you can keep your comments to about five minutes or less or so. And again, if you want to supplement those in writing, feel free to do that. And you can do that any time between now and December 7th.

So again, I have two; I guess there's going to be a third. I have Jeff Miller followed by Beverly Ortiz.

And Jeff, you're the first speaker, I guess. Come up to the microphone and begin.

JEFF MILLER: Hi. Jeff Miller, J-E-F-F,
M-I-L-E-R. I'm the director of the Alameda Creek
Alliance, and we've been working since 1997 to restore
steelhead trout the Alameda Creek. And we're pleased

to say we enthusiastically support this project. It's going to be a significant step in the restoration of steelhead and other migratory fish in Alameda Creek.

And the PUC will be competing with the Alameda County Water District to see who can complete the first major dam removal in the watershed next summer, so also a very historic project.

Three minor issues of concern that we hope will be examined in the EIR. The first is the extent of the removal of Sunol Dam. And I think there was a little bit of controversy and kind of back and forth with the PUC and the National Marine Fishery Service over how far down to remove Sunol Dam to make sure that, in the future, the remaining dam, the subsurface, was never re-exposed and didn't become a fish barrier at any time in the future.

And the Draft EIR says the removal is going to take the dam down to 194.4 feet of elevation. And in the appendix it discussed -- it mentions the discussions with National Marine Fishery Service. They had proposed 193 feet or even 192 feet to avoid the re-exposure.

And so I tried to read through the EIR. It was a little confusing as to why the 194.4 was chosen and why the 193 or 192 [sic]. And so a little bit more

discussion about how that was arrived at. My understanding is that that was the historic channel elevation at the time the dam was built. And the concern was there's been a lot of watershed changes since then. And you know, the channel may find itself in the future at a lower level.

So our encouragement is to make sure that the dam removal is low enough that it is never re-exposed and do the job right while the equipment is in there.

So just be looking for that in the final EIR.

The second minor concern is impacts on other sensitive species, the primary one being the California red-legged frog. We're particularly concerned about their breeding -- there's a significant breeding pond adjacent to the dam. And obviously the dam removal is going to have major benefits, but lowering the groundwater may have an impact on that breeding pond and that population.

So if the PUC can find a way to protect and maintain that pond or recreate that breeding habitat somewhere nearby, just be creative in looking for ways to make that happen.

Nesting birds, the EIR notes there's great blue herons and nesting raptors adjacent and discusses decibel levels and appropriate timing if blasting is

PUC to prioritize other removal methods, if they're possible, just to avoid blasting and the impacts.

And then the last species is the dusky-footed woodrat -- which I didn't know about before this project, but apparently that's a State species of concern. And I talked to someone who knows some scientists who've worked on this. The EIR proposes tracking and moving woodrats, if they're found in the project area. And apparently there's some recent research that shows that they can be successfully relocated if you actually take their wood nests and rebuild them a distance away; they will actually move into their nests and re-inhabit them. So encourage the -- whoever is making that decision to contact me, and I can get you in touch with the biologists who have done that research.

And then the last issue is the sediment issue. I understand there's a little bit of haggling with the County over sediment removal. We support the PUC leaving the sediment in the stream. Our understanding is that we're not talking about a lot of sediment trapped behind these dams. If the dams weren't there, this sediment would have -- you know, dams essentially are preventing the sediment from going into the flood

control channel, which is the County's concern, that they may have to dredge material. And that material would have ended up there anyhow.

Also, it appears from my review of it that much of that material is coarse enough that it's not going to move down into the flood control channel.

Some of that may be important for potential spawning substrate. And we would encourage you to work with the County in focusing on sources of sediment rather than these pockets of sediment which are already moved most of the way downstream.

Our basic message is, we hope the PUC works out an amicable solution with the County for dealing with the sediment issue. If that means paying them a certain amount of money to help with their dredging -- but just that that be worked out so the project can proceed and we can get these dams out.

Thank you, very much.

PAUL MALTZER: Thank you.

The next speaker is Beverly Ortiz, and then after that will be Scott Taylor.

BEVERLY ORTIZ: Hi, I'm Beverly Ortiz. I actually live in Walnut Creek, but I work in Fremont at Coyote Hills Regional Park. I'm not hear representing the Park District; I'm only here speaking on behalf of

myself. My name is mentioned in the form of Bev Ortiz in the DEIR document, which I was just looking at for the first time.

I also want to mention, before I get into details of what I'd like to address, that I am, in addition to a park naturalist, an ethnographic consultant, a Ph.D. candidate in cultural anthropology; and I've done 25 years of research with contemporary California Indians across the state with my dissertation being issues around the contemporary practice of basketry statewide by native peoples.

And in that regard, I work very closely with Ohlone peoples, who are restoring their basketry traditions. And I wanted to take a moment to elaborate on the significance of the sedge beds that are located right by the Sunol Dam just to the east. And as it says in the DEIR, that we have been out there as a group to do gathering of basketry materials for cultural classes. And I've been accompanied by Ohlone people out there.

And there's very few sedge beds. In fact there's virtually non-existence of sedge beds -- a once very common situation in this part of the Bay Area -- anymore. And it's the underground stems of the sedge that are a major component in Ohlone-style baskets.

And to grow straight and long, those rhizomes need to be in a sandy loam soil. And they need to be exposed to flooding. So it has to be the right component of fine-grain sand and clay components so that the underground stems can grow straight.

And you have those ideal conditions right in these beds that are right there by the dam and so few places -- as I said, virtually nonexistence of places -- elsewhere where you can find this level of quality sedge as opposed to the fact it would have been very common in the past.

So in that regard, I just wanted to state publicly that I would be very glad to work with those that are involved in this project to see if there is a way -- and I understand that they're open to this -- that we can restore those sedge beds, if not work the project around the sedge beds and thus maybe preserve the plants and the soil substrate that's so necessary for their long straight growth so that it could then be restored post-project to the degree that it would be possible again for Ohlone people and others interested in those cultural traditions to continue to access and use the site.

And I'll mention -- these aren't in any way rare animals, but when we've been out there to dig

sedge we've encountered woodrats' nests, and we've encountered sites that we've stayed away from where deer are raising their young. And we've come across fawns amidst the sedge just in the starting days of their life. And obviously, when we run across the situation like this, we gather elsewhere so we don't disturb the animals. But for what it's worth, it also has a biological component that's proving to be very good for the local animals.

So thank you for the time, and again, I'm more than happy -- if there's a desire for more information on this or how it might be possible to restore the beds if they can't be kept intact, I would really be grateful for the opportunity to participate in that process.

Thank you.

PAUL MALTZER: Thank you.

Next is Scott Taylor.

SCOTT TAYLOR: My name is Scott Taylor, S-C-O-T-T, T-A-Y-L-O-R, and I'm a member of the board of Alameda Creek Alliance, and I also work with Bev Ortiz in her basketry classes and gathering the sedge. So I kind of have my feet in both topics.

So first of all, I want to encourage the removal of the dam as part of the Alameda Creek

Alliance in returning the steelhead population to the 1 creek. But I also would hope that you would be able to 2 preserve at least some of the sedge beds if not return 3 it afterwards, plus removal of the dam so that the 4 Ohlone peoples can again collect, gather sedge in that 5 6 area. Thank you. 7 PAUL MALTZER: Okay. Is there anyone else who 8 would like to provide comment tonight? 9 (No response) 10 11 PAUL MALTZER: Okay. Thank you all very much for coming. Again, if you want to make sure you're on the 12 distribution list, I actually -- I believe I have names 13 and addresses at least for the three speakers. 14 anyone else wants to be on our distribution list, 15 please get us your name and address. 16 17 Remember that the written comment period extends through December 7th. And with that, I guess, 18 19 we'll close this hearing. 20 Thank you for coming. 21 (Whereupon, the proceedings adjourned at 22 6:51 p.m.) 23

24

25

STATE OF CALIFORNIA ss. COUNTY OF MARIN 2 I, DEBORAH FUQUA, a Certified Shorthand 3 Reporter of the State of California, do hereby certify 4 that the foregoing proceedings were reported by me, a 5 disinterested person, and thereafter transcribed under 6 my direction into typewriting and is a true and correct 7 transcription of said proceedings. 8 9 I further certify that I am not of counsel or attorney for either or any of the parties in the 10 foregoing proceeding and caption named, nor in any way 11 interested in the outcome of the cause named in said 12 caption. 13 Dated the 8th day of December, 2005. 14 15 16 17 18 DEBORAH FUQUA 19 CSR #12948 20 21 22 23

24

25

## M. Responses To: Public Hearing November 30, 2005

- M-1 See response to comment H-1.
- M-2 See responses to comments H-2 and H-3.
- M-3 See response to comment H-7.
- M-4 See response to comment H-6.
- M-5 Part of this comment supports leaving the sediment in place. No response is required. With respect to the comment regarding the material and the flood control channel, see pages IV.F-29 IV.F-31 in the DEIR. No response is required.
- M-6 The importance of the sedge beds to the Ohlone peoples is discussed on page IV.G-10 in the DEIR.
- M-7 See response to comment L-1.
- M-8 Comment noted. With respect to the woodrats, Mitigation Measure D-8 on page V-10 is included in the DEIR. With respect to loss of habitat, Mitigation Measures D-9a and D-9 on page V-11 are included in the DEIR.
- M-9 Part of this comment supports the project. No response is required. See response to L-1, with respect to the comment regarding the sedge beds.

## CHAPTER III

## Staff-Initiated Text Changes

## A. Introduction

The following changes to the text of the DEIR are made in response to comments on the DEIR or are included to clarify the DEIR text. The text revisions are organized by page number (or the first page number if there is more than one) that appears in the DEIR. In each change, new language is underlined, while deleted text is shown in strikethrough.

### **B. Text Revisions**

The third full paragraph on page I-8 is revised as follows:

#### Dam Removal

Niles Dam would be lowered to an elevation of approximately 108.4 feet, which is the estimated historic pre-dam bed elevation and is 6.9 feet below the dam crest. However, the actual height of the dam is not known with certainty, and therefore the depth of removal could be greater than 6.9 feet. The limits of dam removal would be established during predemolition surveys. In addition, the left abutment would be removed in its entirety, and as much of the right abutment as geotechnically feasible (to accommodate the bankfull channel and the floodprone width; Weiss Associates, 2004) would be removed and the aqueduct plugged. Portions of the right abutment are adjacent to SR 84 and may contain a short segment of the Vallejo Aqueduct. Only that portion of the Vallejo Aqueduct within the abutment to SR 84 may be removed. Between 200 and 800 cy of sediment stored behind Niles Dam would be used to fill in the downstream plunge pool.

On pages I-11 and V-2, under Transportation, Circulation, and Parking, Mitigation Measures Proposed as Part of the Project, the best management practice is revised as follows:

Construction signs wouldshall be posted at job sites warning the public of construction work and to exercise caution. When necessary, a person wouldshall be provided for traffic control. A lane may be blocked off to allow for trucks to pull into and out of the access points.

On page I-15, the second bullet and on page V-5, the third bullet is revised as follows:

In-stream dam removal activities will be restricted to low-flow periods (May through October) unless authorized by the NMFS.

The sixth bullet on page I-17 and the last bullet on page V-7 is revised as follows:

Monitoring. The SFPUC will monitor the pond adjacent to the Sunol Dam access
road for the first two five years after dam removal to determine the effects of
lowering groundwater levels on CRLF. Monitoring will include protocol habitat
assessment for CRLF. The monitoring area will include the pond and the project
reach of Alameda Creek.

Mitigation Measure D4-b on pages I-18 and V-8 is revised as follows:

**D-4b** Consultation with USFWS. The SFPUC will consult with the USFWS to establish additional reasonable and prudent measures to avoid CRLF take and mitigation for temporary and permanent impacts to CRLF habitat. To this end, the SFPUC submitted a biological assessment to the Corps and USFWS on March 10, 2005. The Corps and the SFPUC are in consultation at this time. These measures will be implemented in addition to those measures implemented under Measure D-4a.

Mitigation measure D-8 on pages I-19 and V-10 is clarified as follows:

D-8 Measure to protect San Francisco dusky-footed woodrat. A qualified biologist will conduct preconstruction surveys for woodrats before site clearing and grubbing activities. If active stick houses are observed, exclusionary fencing (i.e., silt fencing) will be installed around all project areas that are within 100 feet of active nests. If removal of inactive stick nests is required, a qualified biologist will monitor the removal. If a nest cannot be avoided, then live traps will be set at nest sites to trap and remove woodrats from the anticipated work area. The nest shall then be completely dismantled by the monitoring biologist so that it cannot be reoccupied.

Following Mitigation Measure D-10 on pages I-20 and V-11, the following is added:

## **Improvement Measures**

The following measure is recommended to control bullfrogs during the five-year monitoring period of the CRLF pond after dam removal:

Appropriate measures (e.g., the destruction of any bullfrogs, tadpoles or eggs) will be taken to control bullfrogs during survey work, population counts, and overall habitat monitoring, if feasible, where CRLF monitoring is required.

The following measures are recommended to further reduce the less-than-significant impact to the wetlands containing the sedge bed upstream of Sunol Dam in the event that access across Alameda Creek is required to cross the sedge bed.

A biologist will coordinate with the Contractor to identify a temporary
access route to the creek that is least damaging to the sedge bed, as well as
to the associated willow riparian woodland. During the December meeting,
it appeared the best route is the same as what was used by vehicles during

- the geotechnical investigation of the streambed, as this route will require the least amount of tree trimming and will prevent additional damage to the sedge bed. Any tree trimming will be supervised by the SFPUC or its designated biological resources monitor assigned to the project.
- The temporary access route will be fenced with construction fencing, flagged, and signed to clearly establish that vehicles, equipment, or footpaths will not be placed outside of the designated access route without prior consent of the SFPUC or the biological resources monitor.
- To the extent practical, only low-impacting or lightweight equipment will cross the sedge bed, such as vehicles fitted with balloon tires or tracks.
- Mats will be placed on the sedge bed area to form a temporary road to distribute the weight of the equipment and minimize soil compaction and rutting. The type of mat used will depend on the size of the equipment that needs to access the stream, the duration that the mat needs to be in place, and the time of year. Examples of materials that have demonstrated applicability in similar conditions include: geotextiles (permeable fabrics used for stabilizing the native soil underlying a temporary road and separating the soil from roadbed materials); timber mats (platforms made of several dimensioned timbers fastened into a platform); log corduroys (logs placed alongside each other to form a road); Land Bridge Mats<sup>TM</sup> made from recycled truck tires (for short durations only); expanded metal grating; bridge decks; and sectional high-density polyethylene mats.
- If a temporary access road is required to remain in place and be used for several months or longer, then an engineered solution may be required.

  This may consist of a combination of geotextiles, drainage rock or wood chunks, and lightweight roadbed. Materials with known potential to leach toxic substances, such as construction debris, treated wood, tires, asphalt, or other petroleum-laden materials are not suitable for use.
- If possible, the timing of temporary access route construction and use should be coordinated to avoid the May period of sedge rhizome harvesting. The preferred timing would be for summer use only to minimize the time during which the road is in place during periods of high soil moisture, when it is most susceptible to compaction, and to allow for repair of compacted areas following removal of the road.
- If the temporary access road will remain in place longer than one month, sedges will be salvaged and cultivated by a qualified nursery for eventual use in revegetation of the access route. Salvaging will be supervised by a qualified cultural resources or biological resources monitor.
- As soon as the temporary access road is no longer needed, it will be removed from the sedge bed, and all materials used will be taken away from the project site. Removal will take place from within the designated temporary access route. Areas of compacted soil will be de-compacted

using hand tools, and the area returned to original contours. Addition of fill soil to level the ground surface must be approved by a qualified cultural resources or biological resources monitor. The affected area will be revegetated with sedge plants salvaged prior to construction, if the temporary access road remains in place longer than one month.

• Re-establishment of sedges on the temporary access route will be monitored for one year. At the end of this period, recommendations for further action, if necessary will be transmitted to the SFPUC.

The second bullet from the top of page I-23 and fifth bullet from the top of page V-14 is revised as follows:

Refueling and maintenances of vehicles will be conducted outside of the creek floodplain wherever practicable. All refueling or and maintenance activities involving hazardous materials shall should include provision for secondary containment.

The last paragraph on page I-23 and the paragraph under Historical Resources on page V-15 is revised as follows:

Impacts on architectural resources due to demolition of the historical dams cannot be mitigated to a less-than-significant level, even with implementation of Mitigation Measures G-1a and G-1b. However, the mitigation measures identified below would reduce <u>significant</u> impacts on other historical resources, <u>including the impacts on the Mexican-era Vallejo Dam and Aqueduct under Criterion D</u>, <u>potential impacts on currently unknown or poorly recorded archeological resources</u>, and <u>potential impacts on paleontologic resources</u>, to a less-than-significant level.

Mitigation Measure G-1a on pages I-24 and V-15 is revised as follows:

G-1a Prior to the demolition of Sunol and Niles Dams, the SFPUC will retain a qualified architectural historian who, in consultation with a qualified archaeologist, will document Sunol and Niles Dams in accordance with the Historic American Buildings Survey (HABS) and Historic American Engineering Record (HAER) standards (National Park Service, 2003). Pursuant to Section 110(b) of the National Historic Preservation Act, final HABS and HAER documentation will be submitted to the Northwest Information Center, Sonoma State University, the California Historical Resources Information System, the History Room in the San Francisco Public Library, and the Major Environmental Analysis section of the San Francisco Planning Department. The recordation of Sunol and Niles Dams to HABS/HAER standards, or other treatment measures, does not mitigate to a less-than-significant level the impact caused by demolition of a historical resource (14 California Code of Regulations Section 15126.4[b]); therefore, a significant unavoidable impact remains.

The first paragraph of Mitigation Measure G-1b on pages I-24 and V-15, is revised as follows:

G-1b Before the removal of the Niles Dam, the SFPUC will retain a qualified archaeologist, in consultation with a qualified architectural historian, to prepare and submit to the San Francisco Planning Department's Environmental Review Officer (ERO) for review and approval an Archaeological Research Design/Data Recovery Plan (ARD/DRP) prepared in accordance with the State Historic Preservation Office guidelines for archaeological research designs (California Department of Parks and Recreation, 1991). The principal objective of the ARD/DRP will be to delineate the assumptions, principles, and rules to be followed during the dam's removal. The ARD/DRP will identify the appropriate means necessary to preserve the data defining characteristics of the resource and those elements that convey the significance, of Vallejo Dam and Aqueduct, in terms of with respect to eligibility for listing in the National Register of Historic Places (NRHP)/California Register of Historic Resources (CRHR) under Criterion D. Demolition of the dam as proposed will render it, as an individual resource, ineligible for listing in the NRHP. Methods to preserve the context during the dam's removal include, but are not limited to:

Following the last paragraph of Mitigation Measure G-1b on pages I-25 and V-16, the following paragraph is added for clarification:

Following the demolition of Niles Dam, the evaluation related to the remaining portions of the Vallejo's Mill/SVWC water-conveyance system will be updated by a professional historian/architectural historian and archaeologist. This information will be presented in a collaborative report that will be distributed to the same recipients as the HAER report specified in Mitigation Measure G1-a.

On page I-26, the third bullet and on page V-17, the sixth bullet is revised as follows:

The proposed project will be redesigned relocate construction activities so as to avoid any adverse effects on the significant archaeological resource; or

On page I-27 and page V-18, the last paragraph is revised as follows:

Human Remains, Associated or Unassociated Funerary Objects. <sup>1</sup> The treatment of human remains and of associated or unassociated funerary objects discovered during any soil-disturbing activity will comply with applicable state and federal laws, including immediate notification of the Alameda County coroner. In the event of discovery of human remains, associated or unassociated funerary objects, the Contractor will immediately notify the Alameda County coroner. and, iIn the event of the coroner determines that the remains are Native American remains, the Contractor will notify notification of the Native American Heritage Commission (NAHC), who which will appoint a Most Likely Descendant (MLD) (Public Resources Code Section 5097.98). The

<sup>&</sup>lt;sup>1</sup> Either associated with the burial or not associated with the burial; that is, buried as religious or ceremonial significance given the individual's status in society.

archaeological consultant, SFPUC, and MLD will make all reasonable efforts to develop an agreement for the treatment of, with appropriate dignity, human remains and associated or unassociated funerary objects (CEQA Guidelines Section 15064.5[d]). The agreement should take into consideration the appropriate excavation, removal, recordation, analysis, curation, possession, and final disposition of the human remains and associated or unassociated funerary objects.

The bottom of page II-5 and the top of page II-6 is revised as follows:

Portions of the Alameda Creek watershed, comprising about 633 square miles, once supported viable runs of anadromous fish. According to research conducted by the Alameda Creek Fisheries Restoration Workgroup, in which the SFPUC participates, steelhead are currently prevented from reaching the middle and upper reaches of Alameda Creek because of the presence of downstream migration barriers. In the area where Alameda Creek is a flood control channel (see "Alameda Flood Control Channel" in Figure 2), there are four barriers (the inflatable dams are not barriers when deflated) to upstream migration of adult steelhead. The four barriers, owners, and approximate locations are:

- Lower inflatable dam, Alameda County Water District, quarry ponds
- BART weir, Alameda County Flood Control District, quarry ponds/BART crossing
- Middle inflatable dam, Alameda County Water District, quarry ponds
- Upper inflatable dam, Alameda County Water District, quarry ponds

Following the fourth bullet on page II-6, the following paragraph is added:

Studies have been undertaken or are underway examining the feasibility to modify or remove some or all of the barriers. For example, CH2MHILL prepared a technical memorandum on the Conceptual Fish Passage Designs & Cost Estimates for Lower Alameda Creek (CH2MHILL, 2001). That memorandum proposed fish passage features, such as fishways for upstream migrating adults, and fish screens to protect outmigrating juvenile fish, and minor channel improvements at each fishway. The Center for Ecosystem Management and Restoration, FarWest Restoration Engineering, and WRECO prepared a report titled Conceptual Design and Feasibility of a Natural Fishway at the Fremont BART Weir, Alameda Creek, California (2005) that examines the feasibility of an alternative to the proposed CH2MHILL fishway at the BART weir.

The following references are added to page II-9:

Center for Ecosystem Management and Restoration, FarWest Restoration Engineering, and WRECO, Conceptual Design and Feasibility of a Natural Fishway at the Fremont BART Weir, Alameda Creek, California, 2005.

CH2MHILL, Conceptual Fish Passage Designs Cost Estimates for Lower Alameda

Creek. Available on-line at

http://www.alamedacreek.org/Fish\_Passage/Flood%20Control%20Channel/Flood%20Control%20Channel.htm, accessed January 9, 2006.

The third full paragraph on page III-15 is revised as follows:

#### Dam Removal

Niles Dam would be lowered to an elevation of approximately 108.4 feet, which is the estimated historic pre-dam bed elevation and is 6.9 feet below the dam crest (see Figure 9). However, the actual height of the dam is not known with certainty, and therefore the depth of removal could be greater than 6.9 feet. The limits of dam removal would be established during predemolition surveys. In addition, the left abutment would be removed in its entirety, and as much of the right abutment as geotechnically feasible (to accommodate the bankfull channel and the floodprone width; Weiss Associates, 2004) would be removed and the aqueduct plugged (see Figure 10). Portions of the right abutment are adjacent to SR 84 and may contain a short segment of the Vallejo Aqueduct. Only that portion of the Vallejo Aqueduct within the abutment to SR 84 may be removed (see Figure 4). Between 200 and 800 cy of sediment stored behind Niles Dam would be used to fill in the downstream plunge pool.

Item #5 is added to page III-20 as follows:

5. Alameda County Water District written agreement

The second paragraph on page IV.A-8 is revised as follows:

#### **Historical Resources**

Although primacy is given to historic park protection within the *Fremont General Plan*, Appendix I of the General Plan also provides a list of primary historic resources identified in City Council Resolution 5463 in 1982. No local registries of historic resources (e.g., maintained by the City of Fremont or Alameda County) have identified resources within the project area. Within the project vicinity, the Vallejo Mill site, CA-ALA-548/H, is listed as a Primary Historic Resource in the City of Fremont General Plan.

Following the discussion of the San Francisco General Plan and before the Impacts discussion on page IV.A-8, the following text is added to the DEIR:

#### **Alameda County Water District**

#### **Groundwater Management Policy**

This policy protects and manages the Niles Cone Groundwater Basin. Programs are developed and implemented in response to this policy. The following objectives are included in the Groundwater Management Policy:

- <u>Increase groundwater replenishment capability</u>
- Increase the usable storage capacity of the groundwater basin

- Operate the basin to provide: (1) a reliable water supply to meet baseload and peak distribution system demands, (2) an emergency source of supply, and (3) reserve storage to augment dry year supplies.
- Protect groundwater quality from degradation from any and all sources including: saline water intrusion, wastewater discharges, recycled water use, urban and agricultural runoff, or chemical contamination.
- Improve groundwater quality by (1) removing salts and other contaminants from affected areas of the basin, and (2) improving the water quality of source water used for groundwater recharge.

The third paragraph under 'Project Consistency with Policies' on page IV.A-9 is revised as follows:

The gradual release transport of sediment from the project area following dam removal would not conflict with the Alameda County Public Works Agency's Watercourse Protection Ordinance. As discussed in Chapter III, Project Description, and Section IV.F, Hydrology, Groundwater, and Water Quality, the release of sediment would occur gradually redistribute in a dispersional manner throughout Niles Canyon and be stored in the creek bed, banks, bars, and levees over a period of decades and would not significantly affect the sediment load of Alameda Creek.

The following text is inserted after the fourth paragraph under 'Project Consistency with Policies' on page IV.A-9:

The Alameda County Water District policies related to Groundwater Management focus on improving the storage capacity and water quality of the Niles Cone Groundwater Basin, which encompasses an area to the west of Niles Dam and outside of the project area (San Francisco Bay Regional Water Quality Control District, 2006). Implementation of the project would not conflict with these goals. Measures to minimize impacts to water quality during demolition are included in Chapter V, Mitigation Measures, under Section IV.F, Hydrology, Groundwater, and Water Quality.

The following references are added to page IV.A-10:

Alameda County Water District, Groundwater Management Policy, last amended March 22, 2001.

San Francisco Bay Regional Water Quality Control District website, South Bay
Groundwater Protection Evaluation Report, Figure 5. Available online at
<a href="http://www.swrcb.ca.gov/rwqcb2/sobayground.htm">http://www.swrcb.ca.gov/rwqcb2/sobayground.htm</a>, accessed February 2, 2006.

The second paragraph on page IV.C-1 is revised as follows:

The Alameda County Water District (ACWD) supplies <u>potable</u> water to <u>the Cities of Fremont</u>, <u>Newark</u>, and <u>Union City</u>, <u>which are located in the southern portion of southern</u> Alameda County, including water users in the vicinity of the <u>Niles Dam portion of the</u> project area (ACWD, 2004). An <u>annual</u> average of 49.02 million gallons per day (mgd) of <u>potable</u> water is supplied to ACWD customers. The ACWD obtains water from three sources: the State Water Project (SWP), the SFPUC Hetch Hetchy System, and Alameda

Creek watershed runoff. Two facilities for water treatment, the Mission San Jose Water Treatment Plant and Water Treatment Plant Number Two, are maintained by ACWD. The plants have a combined treatment capacity of about 31 9.5 mgd.

The following text is added to the DEIR at the top of page IV.C-3 before the Impacts discussion:

In Fremont, the East Bay Regional Park District (EBRPD) operates Quarry Lakes
Recreation Area at 2100 Isherwood Way. This recreation area was created through a joint
effort between EBRPD and ACWD. Facilities include a swim beach that is open from
April to October (East Bay Regional Park District, 2006).

The following reference is added to page IV.C-4:

East Bay Regional Park District website. Available online at http://www.ebparks.org/parks/quarry.htm, accessed January 9, 2006.

The second paragraph on page IV.D-7 is revised as follows:

Prior to the development of water conveyance facilities, such as reservoirs and diversions, Alameda Creek, in Niles Canyon, was likely an intermittent to perennial stream characterized by low flows during late summer and fall (Buchan et al., 1999). Aquatic habitats within Niles Canyon likely functioned as a migratory corridor for anadromous fishes such as steelhead, lampreys, and probably salmon (Buchan et al., 1999). However, construction and operation of fish migration barriers, such as the Calaveras and Turner Dams, have prevented anadromous fishes migrating through Niles Canyon from reaching high-quality, cold water habitat (Buchan et al., 1999). Reduced flows from the reservoirs have also decreased successful smolt migration out to San Francisco Bay. Finally, ACWD augments summer flows, particularly summer releases from the South Bay Aqueduct into Niles Canyon. As a result, summer base flows in Niles Canyon have become less variable, thereby increasing pool temperatures and reducing rearing habitat (Buchan et al., 1999). However, although the stream temperatures within the reach are probably higher than pre-development flows, augmented flows potentially provide atypical fast-water habitat that may allow trout to obtain sufficient food to withstand warmer temperatures (Gunther et al., 2000).

The second paragraph on page IV.E-10 is revised as follows:

Five distinct storage features found on the creek are capable of increasing their storage capacity to absorb this increased load without substantially changing the geomorphology of the creek. These storage features—the creek banks, levees, sandbars, floodplains, and creekbed—would regulate the flow of sediment transport downstream. Over the long term (defined for this purpose as 100 years or more), these sediments would eventually reach the Alameda County Flood Control Channel; however, a portion of which would potentially be deposited in locations that may require excavation. The exact fate of sediments once they reach the flood control channel is not easily predicted. hHistorical records of sediment removal in the channel indicate that a majority of the sediment load carried by Alameda Creek passes through the channel only 19 percent of the total volume of Alameda Creek sediment is removed for maintenance of the channel. The current ACFCWCD maintenance program removes approximately 300,000 cy of sediment every 10 years (Weiss Associates, 2004).

#### Footnote #3 on page IV.F-2 is clarified as follows:

Entrenchment describes the relationship of the stream to its landscape. Entrenchment is the degree to which the channel is contained in its a stream is cut into the valley floor and, is typically measured as the ratio of calculated as a ratio of the width of the floodplainprone area (i.e., area covered at flood stage of twice the maximum bankfull depth) to the stream's width of the bankfull width-channel.

The third paragraph on page IV.F-7 is revised as follows:

The combination of suspended load and bedload establishes the total sediment load for the creek. The total average load is 269,000 223,500 tons per year, total median load is 72,000 tons per year, and the watershed yield is 425 tons per square mile per year.

The fourth paragraph on page IV.F-7 is revised as follows:

Assuming an original bed elevation at the dam of 194.4 feet (NGVD 29 datum)<sup>2</sup> and an upstream bed slope of 0.0044 ft/ft (see Figure 14), the estimated volume of sediment stored behind Sunol Dam is 37,000 cubic yards (cy), or 62,200 tons<sup>3</sup> (Weiss Associates, 2004). This amount is about 2.5 times higher than the Conceptual Engineering Report (CER) estimate of 15,000 cy (CER, 2004). The Trihey & Associates report estimated 42,150 cy (2000). Assuming an original bed elevation at the dam of 108.4 feet (NGVD 29 datum) and an upstream bed slope of 0.008 ft/ft (see Figure 15), the estimated sediment volume stored behind Niles Dam is 2,200 cy, or 3,700 tons (Weiss Associates, 2004). The CER estimated between 700 cy to 2,800 cy (CER, 2004), while the Trihey reports estimated 2,200 cy (Trihey & Associates, 2000). Using the more recent Weiss Associates totals, Thus, the total sediment volume stored behind both Sunol and Niles Dams is estimated at 39,200 cy (65,900 tons).

The third full paragraph on page IV.F-10 is revised as follows:

According to Weiss Associates (2004), ACFCWCD removed 863,000 cy of sediment from its flood control channel between 1975 and 1999, and the total sediment load of Alameda Creek from the time of construction of the flood control channel in 1965 through 1999 was 4,500,000 cubic yards. Over the long term, therefore, ACFCWCD has removed 19 percent of the sediment load carried by Alameda Creek. The exact fate of sediments once they reach the ACFCWCD flood control channel is not easily predicted. A model for sediment transport through the flood control channel does not currently exist. What is known is that sections of the flood control channel are subject to sediment deposition, requiring excavation to maintain flood capacity. For example, there were eight desiltation projects between 1975 and 1999 over a distance of eight miles out of a total 11.1 miles of flood control channel (desiltation activities were not carried out over the entire eight-mile length, as the desilted reaches were discontinuous in length). Some of this total length includes overlapping channel reaches that have been desilted more than once (Weiss Associates, 2004).

\_

C&R-100

NGVD is the National Geodetic Vertical Datum established in 1929.

Mass of sediment was estimated based on 1.7 tons per cubic yard of sediment.

Table 10 on page IV.F-10 is revised as follows:

# TABLE 10 SUMMARY OF ANNUAL SEDIMENT LOAD IN ALAMEDA CREEK AND ESTIMATED SEDIMENT IMPOUNDMENT AT SUNOL AND NILES DAMS

#### Annual Sediment Load in Alameda Creek

Total average load Total median load 269,000 223,500 tons per year 72,000 tons per year

## Estimate Sediment Volume Behind Each Dam

Sunol Dam Niles Dam Total Impounded 62,000 tons 3,700 tons 65,900 tons

The paragraph following Table 10 on page IV.F-10 is revised as follows:

A comparison of the average annual sediment load of Alameda Creek and the conservative (high) estimate of total impounded sediments indicates that impounded sediments are approximately 25 29 percent of the average annual sediment load.

The third paragraph on page IV.F-30 is revised as follows:

Table 10 presents a comparison of these quantities. As shown in the table, the total estimated volume of impounded sediment (65,900 tons) is 25 29 percent of the estimated annual average sediment load (269,000 223,500 tons per year) in Alameda Creek. A sediment pulse equivalent in size to that stored behind the dams is likely to be within the normal range of variability of sediments supplied to the channel on an annual basis (e.g., a sediment pulse introduced by landslides) (Weiss Associates, 2004).

The second sentence at the top of page IV.G-12 is revised as follows:

In addition, intact portions of the Vallejo Aqueduct were identified below the roadway (see Figure 22). The State Historic Preservation Officer (SHPO) has concurred with the eligibility of the Vallejo Mills/SVWC system for the NRHP (Scantlebury, 2004).

The third paragraph on page IV.G-13 is revised as follows:

<u>Sunol and Niles Dams are historical structures.</u> Demolition of Sunol and Niles Dams would cause a substantial adverse change in the significance of a historical resources, which is considered a significant impact. CEQA requires that all feasible mitigation be undertaken, even if it does not mitigate the impact to a less-than-significant level. Implementation of mitigation measures (see Chapter V, Mitigation Measures G-1a and G-1b) would not reduce the impact to these two historical resources to a less-than-significant level. As such, the proposed project would result in significant unavoidable impacts to Sunol and Niles Dams.

The fourth paragraph on page IV.G-13 is revised as follows:

The evaluation conducted by JRP (2000, 2003) concluded that Sunol and Niles Dams are individually eligible for the NRHP and, thus, the CRHR. Additional resources also evaluated and found to be eligible properties were the Sunol Valley Filter Beds, the Sunol Water Temple, the Sunol Aqueduct, the Niles Regulating Reservoir, and SVWC's Alameda Headquarters. With the exception of the headquarters, the above resources were determined to qualify as a historic district. The Vallejo's Mill/Spring Valley Water Company (SVWC) system is also considered an historical resource (see page IV.G-12) because it is eligible for the NRHP. As discussed above, research conducted by Caltrans (Scantlebury, 2004) concluded that the Vallejo Aqueduct also separately qualifies for the NRHP and CRHR (Criteria A and D). Among these resources, only Sunol and Niles Dams and theat portion of the Vallejo Aqueduct immediately associated with Niles Dam would be adversely affected by the proposed project.

The last sentence in the third full paragraph of page IV.G-14 is revised as follows:

Implementation of Mitigation Measure G-1b would result in the preservation of all scientific/historical information or of representative remains of the Vallejo Dam and Aqueduct and would thus reduce project effects to the scientific/historical research value (Criterion D) of these historical resources to a less-than-significant level.

Following the last full paragraph on page IV.G-14, the following paragraph is added:

After the Mexican-era Vallejo Dam is demolished, the remaining portions of the Vallejo's Mill/SVWC water-conveyance system, namely the intake structure and the Vallejo Aqueduct, would still collectively be eligible for listing in the NRHP under both Criteria A and D given their significance in terms of the history of water development during the Mexican-era and by SVWC, and in understanding the construction of Mexican-era water delivery systems. The proposed project would not result in a substantial adverse change in the significance of the system as a whole. Therefore, the impact on the Vallejo's Mill/SVWC water-conveyance system as a whole after demolition of the dam is considered a less-than-significant impact.

Appendix D is added to the DEIR as follows:

ACCS – Alameda County Emergency Services

ACFCWCD - Alameda County Flood Control and Water Conservation District

ACFD – Alameda County Fire Department

ACFRW - Alameda Creek Fisheries Restoration Workgroup

ACWD - Alameda County Water District

ADRP – Archaeological Data Recovery Plan

ARD/DRP - Archaeological Research Design/Data Recovery Plan

BMPs – best management practices

Caltrans – California Department of Transportation

CCR - California Code of Regulations

CDF - California Division of Forestry

CDFG - California Department of Fish and Game

CEQA - California Environmental Quality Act

CER - Conceptual Engineering Report

CESA - California Endangered Species Act

CFR - Code of Federal Regulations

CIBA- California Indian Basket Weavers Association

CNDDB - California Natural Diversity Database

CNPS - California Native Plant Society

CNEL - Community Noise Equivalent Level

Corps - U.S. Army Corps of Engineers

CRHR - California Register of Historical Resources

CRLF - California red-legged frog

CWA - Clean Water Act

cy – cubic yards

dB - decibel

dBA -A-weighted decibel

DEIR - Draft Environmental Impact Report

DWR – California Department of Water Resources

ECAP – East County Area Plan (Alameda County)

EIR – Environmental Impact Report

ERO - Environmental Review Officer

ESU - Evolutionary Significant Unit

FARR - Final Archaeological Resources Report

FESA – Federal Endangered Species Act

ft/ft - feet per foot

FYLF - foothill yellow-legged frog

HABS - Historic American Buildings Survey

HAER - Historic American Engineering Record

Hz – hertz

<u>I-280 – Interstate 280</u>

I-680 – Interstate 680

I-80 – Interstate 80

I-880 - Interstate 880

in/sec - inches per second

kilowatt-hours (kWh)

Leq - Equivalent Energy Sound Level

LOS – level of service

MEA – Major Environmental Analysis (section of the San Francisco Planning Department)

mg/kg – milligrams per kilogram

mg/L – milligrams per liter

mgd – million gallons per day

MLD - Most Likely Descendant

mph – miles per hour

MRZ – Mineral Resource Zones

msl - mean sea level

NAHC - Native American Heritage Commission

NCRR - Niles Canyon Railroad

NMFS - National Marine Fisheries Service

NOP - Notice of Preparation

NPDES - National Pollutant Discharge Elimination System

NRHP - National Register of Historic Places

NWIC - Northwest Information Center (of the California Archaeological Site Survey)

OHWM - ordinary high water mark

PBO - Programmatic Biological Opinion

PCBs - polychlorinated biphenyls

PNAs – p-nitroanilines

ppv - peak particle acceleration

RWQCBs - Regional Water Quality Control Boards (State of California)

SCDA – soundless chemical demolition agent

<u>SFBRWQCB - San Francisco Bay Regional Water Quality Control Board (State of California)</u>

SFPUC - San Francisco Public Utilities Commission

SHPO – State Historic Preservation Officer

SMARA - Surface Mining and Reclamation Act

SR – State Route

SVWC - Spring Valley Water Company

SWP - State Water Project

<u>SWPPP</u> – stormwater pollution prevention plan

SWRCB - State Water Resources Control Board (State of California)

TDS – total dissolved solids

<u>TPH – total petroleum hydrocarbons</u>

UPRR - Union Pacific Railroad

USC - United States Code

USFWS – U.S. Fish and Wildlife Service

<u>USGS – U.S. Geological Survey</u>

VTA – Santa Clara Valley Transportation Authority

## **CHAPTER IV**

## References

- Alameda County Water District, *Groundwater Management Policy*, last amended March 22, 2001.
- Center for Ecosystem Management and Restoration, FarWest Restoration Engineering, and WRECO, Conceptual Design and Feasibility of a Natural Fishway at the Fremont BART Weir, Alameda Creek, California, 2005.
- CH2MHILL, Conceptual Fish Passage Designs& Cost Estimates for Lower Alameda Creek.

  Available on-line at
  <a href="http://www.alamedacreek.org/Fish-Passage/Flood%20Control%20Channel/Flood%20Control%20Channel.htm">http://www.alamedacreek.org/Fish-Passage/Flood%20Control%20Channel/Flood%20Control%20Channel.htm</a>, accessed January 9, 2006.
- East Bay Regional Park District website. Available online at http://www.ebparks.org/parks/quarry.htm, accessed January 9, 2006.
- Geomatrix Consultants, Final Report Conceptual Engineering for Removal of Sunol and Niles Dams, Alameda County, California, prepared for the San Francisco Public Utilities Commission, 2004.
- Roche, Anna, Regional Environmental Project Manager, San Francisco Public Utilities Commission, telephone conversation with Gary Stern, National Marine Fisheries Service, December 5, 2005a.
- Roche, Anna, Regional Environmental Project Manager, San Francisco Public Utilities Commission, e-mail communication with Jeremy Sarrow, December 19, 2005b.
- San Francisco Bay Regional Water Quality Control District website, *South Bay Groundwater Protection Evaluation Report*, Figure 5. Available online at http://www.swrcb.ca.gov/rwqcb2/sobayground.htm, accessed February 2, 2006.

